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ABSTRACT

This study reports on the extent to which project designs of World Bank-supported primary education projects in Sub-Saharan Africa take into account the school characteristics that are necessary for effective education. Using a conceptual framework that summarizes research findings on the characteristics of effective schools, the report presents an analysis of how well 26 project preparation documents incorporate community support, supervision, teacher development, textbooks, and facilities into their designs. Based on the analysis, the report draws conclusions about the potential effectiveness of the projects' planned interventions in improving student learning, and it recommends changes in the way the World Bank assists governments in planning and implementing educational reform. Chapters include: (1) "Background and Introduction"; (2) "Methodology"; (3) "The Characteristics of Effective Schools"; (4) "World Bank Lending to Improve the Quality of Primary Education in Sub-Saharan Africa"; and (5) "Implications and Recommendations." (Contains 5 annexes and approximately 240 references.) (Author/EH)

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WORLD BANK TECHNICAL PAPER NUMBER 303
AFRICA TECHNICAL DEPARTMENT SERIES

Schools Count

World Bank Project Designs and the Quality of Primary Education in Sub-Saharan Africa

Ward Heneveld and Helen Craig

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Schools Count

World Bank Project Designs and the Quality of Primary Education in Sub-Saharan Africa

Ward Heneveld and Helen Craig

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Washington, D.C.

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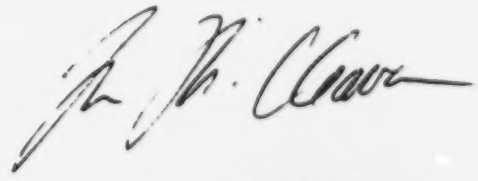
FOREWORD

The idea for *Schools Count* was originally stimulated by three convergent considerations that influence primary education in Sub-Saharan Africa. First, the World Bank's 1988 policy study *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion* and the 1990 Education for All Conference in Jomtien, Thailand, focussed attention on the need to balance better both access and quality issues in improving education in the region. Second, a 1992 evaluation of World Bank lending for human resource development and training in Sub-Saharan Africa concluded that investments in African education, including primary education, by governments and donors over many years have not produced the expected results (World Bank 1992). And, third, international research evidence on the factors that contribute to effective formal education has been accumulating, and many policy analysts and planners are convinced that primary education reform is more successful when interventions focus on implementation at the school level. Based on these considerations, the Human Resources Division of the Africa Technical Department conceived this study as a way to understand how well the Bank and its African borrowers are responding to what is known internationally about how to improve the quality of learning inside schools.

The study began, over two years ago, with a review of the research literature on what influences the quality of primary education. The conceptual framework in this report summarizes the empirical knowledge base on what educational factors are most influential. Examples of how the World Bank is working with African Ministries of Education to help them understand, plan, and intervene to improve primary education are also part of the report.

The report includes a review of research findings worldwide on educational effectiveness and school improvement, an analysis of how twenty-six World Bank project designs respond to this research's findings on school quality, and examples of how the conceptual framework and the findings of the study are being used in Africa. It concludes with recommendations on how African governments, the World Bank, and other donors can create conditions that better enable school-level personnel to improve student learning, even under the daunting conditions that prevail throughout the region.



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ABSTRACT

This study reports on the extent to which project designs of World Bank-supported primary education projects in Sub-Saharan Africa take into account the school characteristics that are necessary for effective education. Using a conceptual framework that summarizes research findings on the characteristics of effective schools, the report presents an analysis of how well twenty-six project preparation documents incorporate community support, supervision, teacher development, textbooks, and facilities into their designs. Based on the analysis, the report draws conclusions about the potential effectiveness of the projects' planned interventions in improving student learning, and it recommends changes in the way the World Bank assists governments in planning and implementing educational reform.

ACKNOWLEDGMENTS

Schools Count: World Bank Project Designs and the Quality of Primary Education in Sub-Saharan Africa has been produced as part of an Africa Technical Department Regional Study on Managing Schools for Effectiveness. The design and content of this work owes a great deal to the encouragement and counsel of colleagues both at the World Bank and at other international education agencies. More signifcant, however, has been the collaboration of African educators, most notably those who have used our ideas as they try to improve the quality of primary education in Guinea, Madagascar, Malawi, Senegal, and Swaziland. It is because of their efforts that we believe this report may be useful to others.

Individuals at the World Bank who provided valuable written comments and insights include Arvil Van Adams, David Berk, Nat Colletta, Jan Leno, Marlaine Lockheed, John Middleton, Paud Murphy, and Adriaan Verspoor. Helpful discussions were also held with Wadi Haddad and Ishrat Husain. Equally valued were the comments received from Ash Hartwell and Joe DeStefano of USAID, Jeremy Greenland of the Aga Khan Foundation, Per Dalin of IMTEC in Norway, and Gabriel Carron of the International Institute for Educational Planning. Othello Gongar conducted the initial review of the twenty-six World Bank project designs to assess how well they attend to the factors which determine school effectiveness. The report was finalized with editorial assistance from P.C. Mohan and was prepared for publication by Aurora Alba and Donna McGreevy.

The contributions of these colleagues are greatly appreciated for they have helped us refine our understanding about how to improve the quality of learning inside schools.

EXECUTIVE SUMMARY

Background and Introduction

In the face of general economic stagnation and with significant donor support, there has been an enormous growth in the provision of primary education in Sub-Saharan Africa in the past twenty-five years. However, the strains placed on educational quality by this rapid growth pose the question: What are the essential characteristics for an African primary school to be effective? To date, adequate answers to this question have not been found because generalization is difficult and the preponderant model for understanding schools is flawed. It is difficult to generalize about what will ensure high quality education because the factors determining effectiveness in education are so complexly interwoven and dependent on the local context. Also, quality is itself a complex concept comprising both changes in the environment in which education takes place and detectable gains in learners' knowledge, skills, and values. At the same time, the econometric input-output model of schooling that has been prevalent among researchers and in the World Bank, and the techniques that stem from this model, are not adequate for understanding and planning improvements in what goes on in schools and classrooms.

A Regional Study on Managing Schools for Effectiveness by the Africa Technical Department of the World Bank is responding to these issues of educational quality. It has three objectives: (1) to document the extent to which project designs of World Bank-supported primary education projects in Sub-Saharan Africa take into account the school characteristics that are necessary for effective education; (2) to provide recommendations for improvement of project designs; and (3) to develop a methodology and a cadre of educators and researchers in Africa who can serve as resources for school-improvement activities.

This report responds to the first two objectives. A literature search on School Effectiveness and School Improvement was conducted to formulate a conceptual framework of the priority factors affecting the quality of primary education. Then, a sample of twenty-six Bank-supported project designs that included as a goal the improvement of the quality of primary education were analyzed to see how well they respond to the factors identified in the literature search. The report presents the conceptual framework and the analysis of the twenty-six projects and offers conclusions and recommendations.

The Characteristics of Effective Schools

In the research on how to improve student achievement, there are two overlapping strands of experimentation and analysis. The School Effectiveness literature looks at the relationship between outcomes of schooling (usually academic achievement) and the in-school and contextural variables that contribute to those outcomes. the School improvement literature looks

at the processes through which successful change is introduced in schools, with "successful" being mostly interpreted as better academic achievement. The most commonly cited factors from these sources are: community support, teacher supervision, textbooks and materials, facilities, school leadership, flexibility and autonomy, student assessments and examinations, school climate, and teaching/learning processes.

The conceptual framework developed for this study used the review of the literature to identify eighteen key factors that influence student outcomes (see diagram on p. 23). The factors are divided into four inter-related categories that are themselves influenced by the context surrounding the school. The four categories include supporting inputs from outside the school and enabling conditions, school climate, and the teaching/learning process inside the school. Drawing from the research, definitions and indicators for each of the priority factors were also prepared for use in the analysis of World Bank projects.

While the factors, definitions, and indicators identified in the conceptual framework are strongly associated with effective schools, it should be cautioned that the research that supports the selection of these factors is mainly focused on the industrial world. This limitation needs to be recognized. However, African educators participated in the formulation of the framework, and the experience so far in several African countries shows the potential of its use when modified in specific local contexts.

World Bank Lending and Factors Affecting the Quality of Primary Education

World Bank lending for primary education in Sub-Saharan Africa is increasing. Priorities for the nineties include increasing children's learning and completion rates, expanding access to schooling (especially for girls), improving the mobilization and efficient utilization of additional resources for primary education, and committing to long-term development programs for primary education. However, concern within the Region that investments are not having the expected impact on student learning has led to this study's analysis of on-going Bank-supported projects. Information for the analysis was obtained from Staff Appraisal Reports and, in some cases, from reports by the Task Managers. Each project was examined to see how well the design of projects which sought to improve the quality of primary education paid attention to the factors associated with the quality of education.

The analysis of the Bank projects leads to two major conclusions: First the project designs analyzed addressed an array of inputs that are known to affect educational outcomes: community support, supervision, teacher development, textbooks, and facilities. In this respect, the influence of research on design is encouraging. However, the focus is on these factors as inputs -- textbook supply, residential teacher training courses, national curriculum reform, national examination systems -- not on their integration within schools. Second, the project designs tend to ignore the process factors that characterize effective education within schools -- school-level autonomy, school climate, the teaching/learning process, and pupil evaluation and

feedback by teachers. The project designs also tend to treat inputs as discrete quantifiable instruments (numbers of textbooks and teacher's guides, weeks of in-service training) without taking into account how they will interact with other inputs, especially at the school level.

These conclusions are based on the findings for each of the main factors in the conceptual framework:

- The *community support* elements in twenty of the twenty-six projects are mostly designed to obtain community contributions for improving the physical facility. Little explicit attention is given to bringing the school staff and the community closer together, to involving community members as learning resource people, and to providing health and nutrition support;

- The twenty projects that seek to strengthen *teacher supervision* concentrate resources on equipping and upgrading personnel, almost always in academic residential courses away from teachers' own schools. Similarly, twenty-four of the projects have components for strengthening pre-service or in-service training, but only eight of the projects include in-school dimensions to the training;

- All but three of the projects contain *textbooks and materials* components, but most of the funding is for publishing, printing and distributing the books. Only eight projects include plans to train teachers in the use of the new books, and not one project includes a reference to the supervision of the books' pedagogical use in the schools;

- Nineteen projects included *facilities* construction components, almost all of them designed with an element of community participation;

- Fourteen of the projects include components to make *school leadership* more effective. The principal means for upgrading the skills of school heads is through residential training courses. There is very little planned follow-up in schools and almost no proposed changes in policy and administration to enhance the pedagogical status of school heads;

- Although the study found that fourteen projects proposed to increase local *flexibility and autonomy*, devolution of authority was always to local authorities, and the projects do not respond to the research finding that greater school autonomy can improve its academic results;

- While twelve projects include investments related to improving *assessments and examinations*, all of these are for reforms of the national evaluation system, not for helping teachers improve their classroom use of assessment;

- Finally, and most disappointingly, none of the twenty-six projects deals explicitly with issues related to *school climate* (high expectations of students, positive teacher attitudes, order and discipline, clear learning objectives, and rewards and incentives for students) or to *teaching/learning processes* (high learning time, variety in teaching strategies, frequent homework, and frequent student assessment and feedback).

Overall, the analysis supports the conclusions mentioned above: Even though governments and the World Bank have invested in inputs that contribute to the quality of primary education, they have been concentrating on policy decisions and large-scale programming that serve system needs more directly than school needs; and the closer the factor is to the life of the school and to what touches the children directly, the less likely it is to be planned for explicitly in projects assisted by the World Bank.

Improving the Design of School-Based Reforms

While the analysis of the World Bank designs was underway, field experience in the application of the conceptual framework to improve the quality of primary education in Sub-Saharan Africa was accumulating. The combination of analysis and experience suggests how the materials produced in this study can be used to improve education and suggests recommendations for improving the procedures and operating styles of the World Bank, other donors, and African educational planners.

It is striking that none of the twenty-six project designs studied had clear operational definitions of what was being sought for the students' learning environment, and none included definitions of the knowledge and skills expected of a child when he or she leaves primary school. As part of their work in applying the materials presented in this study, staff from the Ministries of Education in Madagascar, Senegal, and Swaziland have formulated statements of learning objectives and definitions of desired characteristics of primary schools. The Ministries in Madagascar and Swaziland are using these statements of desired outcomes to formulate strategies for the reform of primary education. In Senegal, the framework developed has been used by individual schools to prepare grant proposals for the pilot implementation of a School Development Fund in one region, and the national educational research institute is using it to monitor and evaluate this pilot implementation.

In order for investments in education to focus on the factors internal to schools, both governments and donors need to change the way they plan and implement educational reform. Recommendations that arise from the analysis in this study include the following:

- Governments should operationally define the expected outcomes for students and the priority conditions in schools that need to be strengthened if these outcomes are to improve *before a reform program is designed.*

- Governments should establish a system for monitoring implementation and the impact of changes using indicators derived from the expected outcomes and priority conditions mentioned above;

- Donors should allow for more flexibility in the timetables for developing a loan or grant;

- Donors should make shorter but more frequent visits to the field, identifying planning problems and providing advice rather than doing the planning (this may imply a greater regional field presence);

- Donor staff should improve their skills and be given incentives for consulting and advising when in the field;

- Governments and donors should improve staff knowledge and skills with respect to in-school factors. This requires spending more time in schools looking at and listening to what is going on;

- Governments and donors should expect all planning docements (e.g., Staff Appraisal Reports in the World Bank) to include a statement of expected learning outcomes and a selection of priority school characteristics, with indicators, that the investment is expected to improve.

Conclusion

Current practice in the development of education in Sub-Saharan Africa is tending to move in the direction of these recommendations. However, investment programs for primary education in Sub-Saharan Africa need to accelerate the trend towards a greater focus on what happens inside schools, towards an even richer package of considerations of what makes education successful at the school level, and towards sectoral policies that empower schools and communities to control better the education of their children. The governments' role is to take the initiative in deciding what education's objectives, priorities, and reform strategies should be. It should be the donors' role to facilitate the process of reflection, definition and planning, not to directly determine the substance of it. If World Bank staff and the representatives of other donors become better facilitators, with a deeper understanding of the internal dynamics of schools, they will contribute more to bringing about these needed changes.

CHAPTER 1: BACKGROUND AND INTRODUCTION

African Primary Education and the World Bank

There has been tremendous growth in the provision of primary education in Sub-Saharan Africa (SSA) in the last twenty-five years. Enrollments in primary schools in the region have increased 350 percent, from about 16 million pupils in 1965 to almost 56 million in 1989 (BESD/Andrex, World Bank database using UNESCO data of 17 February 1992), but rapid population growth has not allowed participation rates to improve much, especially in the last ten years. Expansion has put pressure on the quality of primary education as the growing number of students, general economic stagnation, in the region and allocations of public resources to other sectors and higher levels of education have reduced governments' ability to support teachers and schools (World Bank 1988; Colclough 1995).

International donors have contributed significantly to help African primary schools absorb more students and maintain educational quality. From the beginning, they have provided funding for school construction and over the years have broadened support to include, most notably, teacher training, curriculum and examination reform, and textbooks. Since 1972, the World Bank alone has loaned over $620 million to the region for projects in primary education. Attention to issues of educational quality was heightened by the World Bank's 1988 policy study on education in Sub-Saharan Africa and by the realization of governments and donors at the 1990 Conference on Education for All in Jomtien, Thailand, that access to school and the maintenance of quality need to be better balanced. In the 1990s, national strategies for reforming primary education in Sub-Saharan Africa have paid even more attention than before to the quality of education.

Despite the large investment in primary education and the concern for quality, current conditions in most primary schools throughout the region dishearten visiting educators. For example, in much of Africa, a typical rural or suburban primary school consists of six to ten classrooms in two or three blocks. If the school is fortunate, the oldest block will have been built sturdily, though newer blocks, often built by the community, may seem temporary. These blocks will vary in quality, from mud and wattle to cement block construction; all will suffer from inadequate maintenance; and most will usually be surrounded by a dusty compound. Up to eighty small children will squeeze into poorly-lit rooms designed for no more than forty, and many children may not have chairs or desks. The teachers must attempt to provide instruction with only a chalkboard as an aid. Children may have notebooks, and a few, depending on the country and on local economic conditions, may have textbooks. The teaching process is dominated by the teacher whose delivery is usually desultory and boring. The teachers' salaries, training, and work conditions dampen the enthusiasm of even the most dedicated among them. The overall effect in most schools is that of a ritual being played out in which the participants understand and appreciate

little of what is happening.[1] It is small wonder that student achievement is poor and that primary school enrollments in some countries in the region have declined.

This composite picture of an African primary school is sufficiently accurate to pose the question: What are the essential basic conditions for an African school to be effective? Schools with the poor conditions described here, and they probably constitute the majority in most African countries, provide a place for instruction, teachers, and, when possible, some supporting equipment and material. However, the amount and quality of these elements do not come close to the standards usually expected for formal schools. African countries, with support from donors like the World Bank, face the challenge of defining for themselves those essential conditions that they can reasonably expect to create and sustain in their schools. It is because resources are scarce that the conditions invested in must contribute directly to learning. It is the contention in this report that investments in education development, including those of the World Bank, have not focussed enough on maximizing learning.

African governments, the World Bank, and other donors have begun to recognize that a supply of inputs is not sufficient to ensure educational quality. Inputs must be integrated into the ongoing life of each school. But the planning and the implementation of programs to improve schooling does not usually consider this integration. An example may help to clarify this point. During a 1993 visit to supervise a Bank-assisted project in an African country, a group from the Ministry of Education and the World Bank visited a school to observe first-hand the project's results in supplying new classrooms and textbooks. The new three-room classroom block was well-built and in use for the upper grades, and the twelve new textbooks in each subject in grade 1 (three pupils per textbook based on a national student/class ratio of about thirty-six) had been received. However, the first grade classroom was housed in the only one of the three rooms in the old school compound that still had its roof intact. This dilapidated mud-floor room had no desks and no door; there were over ninety pupils ranging from pre-school-age siblings to teenagers sitting on raised mud ridges across the room; and there were no textbooks in sight. Queries to the teacher elicited that a few of the new books for a couple subjects were in a book bag in the corner. The rest were in the teacher's house because the room had no door and there was no cupboard which would force him to cart them back and forth each day. Also, he told the visitors that his orientation to the new books had been a one-day (including travel) seminar at the district headquarters, and there had been no follow-up to help him figure out how to use twelve copies of a textbook with ninety students. In the project's terms, the textbook component had been succcessful: the books were in the school. In the teacher's and the childrens' terms, the books were not yet available. We believe that only by focussing on the integration of inputs -- books, in-service training, furniture, head-teacher supervision, etc. -- at the school and classroom level will reforms that seek to improve the quality of learning be successful. What is required is a clear operational definition of the conditions that are sought in all schools and a comprehensive

[1] This picture of an average primary school is in good part derived from the author's visits to over fifty primary schools in nine African countries during the period 1993-1994.

strategy for how to support improvements in each school *before* a program's inputs, budget, and implementation plan are designed. These operational definitions and strategies are rarely made explicit before detailed planning is done.

The lack of a clear definition of the conditions for school effectiveness in Sub-Saharan Africa is not surprising for at least two reasons: generalization is difficult and the preponderant model for understanding schools is flawed. First, the factors determining effectiveness in education are so complexly interwoven and dependent on the local context (Fuller and Clarke 1994) that it is very difficult to generalize about what constitutes high quality education. Hawes and Stephens (1990) present definitions of quality in terms of efficiency, relevance, and "something more" from the perspective of *whose* concerns are being addressed: parents, teachers, administrators and managers, students, and the state. More generally, discussions alternate between talking about student outcomes, usually academic achievement, and "quality education," the process that produces those outcomes. This study has adopted the point of view, first defined by C.E. Beeby (1979), that it is possible to know when the quality of education improves and that, therefore, what is sought is "qualitative change." This qualitative change element has been captured in a more recent definition of quality in education by Ross and Mahlck (1990, p. 6): "an improvement in the environment in which the student work[s] with the aids to learning provided for that purpose by the school system, and [when] this improved environment [has expressed] itself as detectable gains in the knowledge, skills, and values acquired by students". This study takes the process of education in a school, not the school's outcomes, as the focus for a definition of quality, and the characteristics and their definitions (Annex 3) identified in the framework provide the details of our meaning of "quality." Assuming that the research reviewed is valid, it is our belief that creating the school conditions identified will provide higher quality learning outcomes.

Second, and most important, the econometric input-output model of schooling and the techniques that stem from this model are not adequate to understanding and planning improvements in what goes on in schools and classrooms. Many researchers and planners have viewed the school as a unit of production, and their planning techniques tend to follow the principles of industrial systems analysis: specify the output desired (academic achievement); identify the inputs required to produce these outputs (buildings, teachers, textbooks, equipment, etc.) and their factor mixes; and introduce these inputs into the system. The assumption is that the system works the same way in all the production units (schools) so that the desired outputs are uniformly produced efficiently and effectively. If the system lacks the expected capacity, an additional project component is included for "institutional development." Using this approach, it is not difficult in a few visits to a country to identify the most significant problem areas in the education system and to define the inputs to schools needed to resolve them. However, an economist who reviewed the input-output, production-function research literature on education almost ten years ago concluded that "typical industry and aggregate production function specifications provide little direct guidance in educational analysis, because they seldom are designed to deal with the detailed policy questions that have been central to investigations of school" (Hanushek 1986, p. 1142). To this reservation, this report adds the conclusion of other researchers, one that we subscribe to, that schools are organic social systems with significant day-

to-day autonomy, and that change can only evolve according to each school's individual contexts and conditions (Hoy and Miskel 1987; Joyce, Hersh and McKibbin 1983; Parsons 1959; Rosenholtz 1991).

The World Bank, being a financial institution, has tended to favor econometric models in analysis and planning for education. The Bank is, after all, a financial institution. We believe that the analysis that follows provides evidence that, at least in the World Bank, an over-reliance on this approach has inhibited the creation of integrated school-level project designs which explicitly take into account the important factors of school climate and teaching/learning processes. The examples of new activities provided in Chapter 5 demonstrate that the World Bank's structure and procedures, supported by its new policy directions focussing on more bottom-up program preparation, can accommodate a synthesis of input-output and social system approaches. Both approaches are certainly required to plan successful improvements in the quality of eduation.

Overview of the Study

The Regional Study on Managing Schools for Effectiveness, of which this report is a part, is aimed at people who are involved in the planning of programs to improve the quality of primary education in Sub-Saharan Africa. African educational planners and decision-makers should find here ideas that will help them plan and implement educational improvement activities that respond directly to the realities and possibilities of Africa's primary schools. Similarly, Task Managers at the World Bank and other international education program staff may see ways to improve the process whereby they help their African counterparts design effective projects.

The objectives for the overall regional study are addressed to these groups of educators and planners. They includes the following.

- To document the extent to which project designs for World Bank-supported primary education projects in Sub-Saharan Africa take into account the school characteristics that are necessary for effective education;

- To provide recommendations for improvement of project designs by identifying conditions in African primary schools that encourage successful project implementation; and

- To develop a methodology and a cadre of educators and researchers in Africa to serve as a resource for school-improvement activities.

The Regional Study is composed of two sets of activities: (i) research on the relationship between the designs of Bank-supported projects and the research literature on school effectiveness and school improvement; and (ii) operational applications of the results of this analysis to problems

of educational quality in selected countries in the region. A companion publication, Planning and Monitoring the Quality of Primary Education in Sub-Saharan Africa (Heneveld 1994), has already contributed in both areas of activity. This report, the final product of the first activity, provides a conceptual framework that identifies the characteristics of an effective school based on a review of research results (see summary diagram on p. 23) and examines how twenty-six Bank projects supported by the World Bank in Sub-Saharan Africa respond to this framework. Since other donors have also supported many of these projects and have invested in similar interventions on their own, the study would have been more representative if projects funded by other donors had been included. Resources and manpower precluded this broader approach. The last chapter of the report summarizes the study's findings, gives examples from countries where the materials presented here have been used, and offers conclusions and recommendations on how to improve the design and implementation of education programs that focus on the teaching/learning process in individual schools.

CHAPTER 2: METHODOLOGY

Introduction

This research is based on the review of two kinds of sources. In order to determine the factors that characterize effective schools that should be considered by projects seeking to improve educational quality, the research literature on school effectiveness and on school improvement was explored extensively. At the same time, twenty-six Bank-supported primary education projects in Sub-Saharan Africa were selected, and the documentation on them (Sector Reviews, Staff Appraisal Reports, and Supervision Reports) was analyzed. Using the notes from both reviews, the project designs were then assessed to see how well they incorporate attention to the most significant characteristics of effective schools.

Literature Search on School Effectiveness and School Improvement

In the research, there are two overlapping strands of experimentation and analysis. The School Effectiveness literature looks at the relationship between outcomes of schooling (usually academic achievement) and the in-school and contextual variables that contribute to those outcomes. The School Improvement literature looks at the processes through which successful change is introduced in schools, with "successful" being mostly interpreted as better academic achievement. In searching this literature, we did not differentiate explicitly between the two areas of research but looked for areas of agreement about which school factors contribute to student success.

Initially, the authors identified the factors related to school effectiveness most often cited in articles and reports that summarize this research (Dalin 1992; Farrell 1989; Fuller 1986; Haddad et al., 1990; Huberman and Miles 1984; Joyce; Lockheed and Verspoor 1991; Purkey and Smith 1983; Scheerens and Creemers 1989). Based on this review, the first draft of the conceptual framework presented in Chapter 3 was formulated. Then, one of the authors conducted a thorough search of the literature, producing the Bibliography in Annex 2, and a set of quotations on each of the characteristics that has been included in the final version of the conceptual framework. The quotations were used to revise the conceptual framework and to formulate a working definition and indicators for Sub-Saharan Africa for each of the characteristics of an effective school..

In moving from the literature search (in which the majority of the references are to Europe and North America) to the definitions (which are meant to be relevant to Africa), the authors and a consultant studying the Bank documents, himself a senior African educator, drew on their own school-level experience in the region. Still, we recognize that we have gone beyond the strictures of formal research in saying these definitions are appropriate to Africa. In recognition of the danger

that the definitions may be perceived as more prescriptive than we intend them to be, we have tried to keep the definitions general enough that they can be revised or discarded according to the context in which others may consider applying them.

Review of Bank Project Designs

The sample of Bank-supported projects selected for study was chosen by reviewing the project supervision reports (Form 590) for education projects in Sub-Saharan Africa that are currently under implementation. If the very brief project summary on the Form 590 included any objectives that related to improving the quality of schooling, the project was included in the initial sample, and the Staff Appraisal Report (SAR) for the project was checked to make sure it included an explicit investment in the quality of education. The projects selected for the document review are listed in Annex 1.

Data on each of the project designs were collected using a questionnaire that asked whether and how the characteristics of school effectiveness that had been identified for the conceptual framework were addressed by a project. Notes were written for each project based on an analysis of the Staff Appraisal Reports (SAR). The findings from the study of the Appraisal Reports were then summarized on a LOTUS spreadsheet by project and by characteristic (Annex 2B). These notes provide the basis for the commentary on the projects that is presented in Chapter 4.

Most of the projects in the sample had been delayed so that it was difficult for Task Managers to comment on what the project's in-school effects may have been so far, and we were not able to visit projects in the field. Consequently, this report has not considered what has happened during implementation of the projects whose designs were analyzed. The analysis only looks at how well project design, as presented in World Bank documents, responds to what is known about factors affecting educational quality. This, we ackowledge, is a serious shortcoming of the study, and a follow-up set of case studies on the implementation of a sub-set of the sample would add considerably to understanding if and how governments have responded to school-level realities during implementation.

The analysis in Chapter 4 results from a comparison of the notes on each project with the definitions of the characteristics of effectiveness. Each project design was checked to see if any reference is made to each characteristic and, if it was, to note what activity (if any) was explicitly identified as contributing to the development of the characteristic in individual schools. As when writing the definitions of the characteristics, this stage required further judgement as to the transferability to Sub-Saharan Africa of concepts derived from education in the industrial world.

CHAPTER 3: THE CHARACTERISTICS OF EFFECTIVE SCHOOLS

Introduction

Improving student learning achievement is the major goal by which school effectiveness is judged. As mentioned previously, much of the research to suggest the best way of doing this has come from two traditions, the Effective Schools and School Improvement movements. There is a great deal of complementarity and helpful overlap between these two perspectives. Effective Schools research uses quantitative input-output analyses of data from large-scale surveys to identify significant system-wide variables: But it does include analyses of school processes when they can be quantified. On the other hand, School Improvement research relies on qualitative in-depth case study methods to understand process variables within schools more fully, including an understanding of which inputs are most significant. This research may quantify some of its analysis and use statistical analysis to better establish connections among variables, usually at the school level. A third approach lying between these two movements has used survey methods to identify particularly good schools and then studied school-level variables in depth in those schools (Dalin et al. 1992). The following section provides a summary of the research, the key factors, and the major research problems and ongoing issues according to both these traditions, recognizing that the assignment of some studies to one tradition or the other may be arbitrary. It also suggests additional factors that need to be considered when applying these ideas to developing countries.

Effective Schools Research

Research from the Effective Schools movement uses the production function paradigm to determine causal relationships between educational inputs and processes, on the one hand, and student outcomes on the other. The emphasis is on using quantitative analytic techniques to determine how much of students' academic achievement can be "explained" by different school inputs. There are two variants of this approach. Among educators, the emphasis has been to determine the factors that are most important in determining student achievement and to weight the factors in terms of their "significance." On the other hand, economists have sought to "weight" factors as well, in search of the "least cost" mix of inputs for producing a given level of student learning. A definition by an economist (Hanushek 1986, p. 1148) summarizes the school effectiveness approach to research:

> Studies of educational production functions (also referred to as "input-output" analyses or "cost-quality" studies) examine the relationship among the different inputs into and outcomes of the educational process. These studies are systematic, quantitative investigations relying on econometric, as opposed to experimental, methods to separate the various factors influencing students' performance.

The results of this research have been used to argue for investments in those inputs, alone or in combination, that are most significantly related to student outcomes.

The Effective Schools literature is based on research mainly from the United States and the United Kingdom, some of which has been done on developing country education systems. More recently, other countries including Australia, Canada, and the Netherlands have added to the research literature and practice of this movement, and school effectiveness research in developing countries is expanding (see subsequent text). The school effectiveness movement in the United States has witnessed a strong, rather impulsive move to adopt the features of schools that the research has identified as related to effectiveness. In the United Kingdom, the school effectiveness studies have created new statistical procedures, including linear modeling, for studying school effects from a multi-level viewpoint (Bryk and Raudenbush 1992; Goldstein 1987; Longford 1987) but this research has not had as much effect on educational reform in the United Kingdom as in the United States.

In the United States, the Effective Schools movement began in the 1960s. The first period of the movement, until 1976, produced mainly descriptive studies of individual Effective Schools. During the next four years, a coalition was formed between the Effective Schools researchers and school-based practitioners for school improvement. The characteristics of effective schools that were most commonly cited then because of the popular work of Ronald Edmonds (1979) were:

- Strong leadership of the principal;
- Emphasis on mastery of basic skills;
- A clean and orderly school environment;
- High teacher expectations of student performance; and
- Frequent assessments of student progress

British researchers in the 1970s, including Rutter et al. (1979), and later Mortimore et al. (1988) identified a range of practices that were thought to improve student achievement regardless of student socio-economic background. The extended list of factors that they identified as characteristic of effective schools are similar to those factors identified in the United States.

Although different researchers have suggested slightly different lists, the most common process and organizational factors cited include:

Process Factors:

- Clear goals and high expectations;
- Collaborative planning and collegial relationships;
- Sense of community;
- Order and discipline; and

- Flexibility and autonomy.

Organizational Factors:

- Strong parent and community support;
- Effective support from the education system;
- Adequate resources;
- Schoolwide staff development;
- Effective leadership;
- A capable teaching force;
- Maximized learning time;
- Variety in teaching strategies;
- Curriculum articulation and organization;
- Schoolwide recognition of academic success;
- Staff stability; and
- Frequent, well-supervised homework

According to Farrell (1989), during the early 1970s a series of studies in developing countries similar to those undertaken in the United States and the United Kingdom, concerning factors that affect student achievement, began to be reported, beginning with Chile (Schiefelbein and Farrell 1973), then Uganda (Heyneman 1976). Results from these studies and many of those that were to follow showed a marked difference between developing and industrial nations in the importance of school-related factors on student achievement. The quality of the school (in-school variables) seemed to influence student achievement more in developing nations than in industrialized nations where school quality was overshadowed by the child's family background (out-of-school variables). More recent research on school effectiveness in developing countries, much of it related to the USAID-sponsored BRIDGES project, has enriched educators' understanding of how important variables are influenced by the context surrounding the school.[2]

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[2] Developing countries in which school effectiveness research has been done include Argentina (Echart et al. 1976), Bangladesh (Dalin et al. 1992), Belize (Nielsen 1992), Botswana (Fuller and Haiyan 1992; Fuller and Snyder 1991; Perry et al.1992; Prophet and Rowell 1990), Brazil (Armitage et al. 1984), Burindi (Schwille et al. 1990), Chile (Schiefelbein and Farrel 1974; Schiefelbien and Farrell 1982,1984), Congo (Youdi 1971), Colombia (Arriagada 1981; Dalin et al. 1992; Psacharopoulos and Zabalza 1984), Ethiopia (Dalin 1992); Ghana (Bibby and Peil 1974), Haiti (Haitian Foundation 1991), Honduras (Reimers 1992), Indonesia (Clark 1983; Cummings and others 1992; Nasoetion et al. 1976; Tangyong et al. 1989), Iran (Ryan 1973), Kalahari (Loxley 1984), Malaysia (Beebout 1972), Mexico (Klees 1975), Nicaragua (Jamison 1978; Jamison et al. 1981), Nigeria (Lee and Lockheed 1990; Lockheed and Komenan, 1988, 1989; Urwick and Junaidu, 1991), Pakistan (Jatoi 1992; Klitgaard et al. 1985; Reimers 1992a; Rowley 1992; Rugh 1992; Warwick and Reimers 1992), Peru (Arriagada 1983), Phillipines (Heyneman, Jamison and others 1984), Puerto Rico (Carnoy 1971), Sierra Leone (Windham 1970), Sri Lanka (Tatto et al. 1992a,b; Warwick and others 1992), Swaziland (Lockheed and Komenan 1988), Thailand (Fuller and Chantavanich 1976; Raudenbush 1992; Raudenbush et al. 1991, 1992; Schwille and Wheeler 1992; Wheeler and others 1989), Tunisia (Carnoy and Thias 1974), Uganda (Currie 1977; Durojaiye 1974; Heyneman and Jamison 1980), Zimbabwe (Chung 1992; Riddell and Nyagura 1991).

The most recent summary of the school effectiveness research in developing countries has included the following factors as important if an effective school is to be created (Levin and Lockheed 1993):

Necessary Basic Inputs

- Instructional materials such as textbooks, supplementary teachers' guides and materials, library books, etc.;
- A curriculum with appropriate scope and sequence and content related to pupils' experience;
- Time for learning (the number and length of school days); and
- Teaching practices (active student learning to include discussion, group work, etc.)

Facilitating Conditions

- Community involvement, to include good school/ community relations and parental involvement in the school;
- School-based professionalism to include leadership by the Schoolhead, teacher collegiality and commitment, accountability through assessment and supervision, and support;
- Flexibility relevant to pupil curricula, adjustments in level and pace, organizational flexibility to include school clusters, multi-grade teaching, and pedagogical flexibility to include teaching innovations; and
- The will to act, i.e. having vision and using de-centralized, school-based solutions to problems (Lockheed and Verspoor 1991).

While these factors are very similar to those identified in the studies on industrial nations, other supporting inputs that are taken for granted in these countries, and thus not often included as research variables, have been found to be important in developing countries. The factors not researched well in Europe and North America but found to be important in developing countries include adequate materials and instructional support for teachers and students, an appropriate language of instruction, and healthy students.

Effectiveness correlates or factors such as those mentioned here should be viewed as potential contributors to school quality, not as guarantors of quality. That the factors interact to reinforce each other is at least as important as their presence in a school. For example, textbooks will be used more effectively when there is good leadership, when everyone knows the curriculum, where there is a stable teaching force, and when the schoolhead has flexibility in how he or she manages the school. Variations in any of these variables will influence the others.

The difficulties in analyzing data and replicating studies of the complex interplay among factors affecting school effectiveness makes uncertain the empirical base for generalized conclusions about what makes a school effective. However, the common findings across settings and using different analytic techniques suggest that effective schools are characterized by the factors identified previously. When these factors work together, they improve student achievement.

School Improvement Research

School Improvement usually refers to a school's attempt to "implement an innovation with the ultimate aim of producing positively valuable changes in student learning outcomes, in teachers' skills and attitudes and in institutional functioning" (Center for Educational Research and Innovation 1981). While drawing on the models of school effectiveness, this tradition emphasizes the processes of change in a school. As such, the research methods used have tended to be qualitative, relying on open-ended interviews and observations. The results have therefore often received criticism because they lack objectivity and do not adequately examine curriculum matters (Creemers and Reynolds 1989). Miles and Huberman (1984, 1984a, 1984b) have developed methodologies that structure qualitative data on change in schools for objective analysis, providing strong support for the validity of research that uses these methodologies. For developing countries, a recently completed study of educational reform in Bangladesh, Colombia and Ethiopia that Miles participated in has successfully applied School Improvement research methods to developing countries (Dalin et al. 1992).

The strength of School Improvement research lies in its concentration on how change occurs in school systems. This research tends to be holistic and action-oriented, often proposing improvement strategies that seek to achieve long-term goals. Some researchers contend that change should be incremental (Verspoor 1989) and others urge dramatic restructuring (Levin 1991). In either case, the key themes identified by the main researchers on school improvement (Huberman and Miles 1984; Fullan 1991) include:

- Effective leadership;
- Shared vision-building and support of school improvement permeating the organization at both the school and district levels;
- Commitment and acceptance of school improvement efforts;
- Active initiation and participation;
- Changes in behavior and beliefs;
- Collaborative planning and decision-making;
- Organizational policies, support for action and press for improvement;
- Staff development and resource assistance;
- Monitoring efforts for accountability and improvement; and
- Recognition for jobs well done.

The School Improvement tradition has had less impact on educational research in developing countries than has research on school effectiveness. The only extensive application of this approach has been the recent study of reforms in Bangladesh, Colombia, and Ethiopia entitled "How Schools Improve", that Dalin et al. (1992) recently completed. Their findings (Dalin et al., p. 208) are consistent with the findings for industrial countries, their draft final report summarizing the characteristics of excellent schools as:

- The in-service training process is well implemented, regular, relevant and practical;
- The school works actively on the adaptation of the curriculum and the production of local teaching-learning materials (except in Bangladesh);
- The headmaster is motivated, plays a more active coordination and supportive role is an instructional leader, works closely with teachers, encourages teachers, and shares responsibilities;
- There is a team spirit in the school, teachers cooperate, student attitude toward the reform is positive, and teachers help each other with instructional problems;
- Supervision is regular, shared between the supervisor and the headmaster (though not in Colombia), and appears as a combination of pressure and support;
- The school experiences more success, more positive students, 'changes in kids' (Colombia), teacher cooperation, professional exchanges and extra resources (e.g. from the community);
- The school gets more support from the community; parents are more interested in the schooling of their children, the community gives material support and financial support (Ethiopia);
- There are other country specific factors that discriminate these schools, including empowerment (Ethiopia), local adaptation of materials (Ethiopia), and pressure (Bangladesh).

Going beyond identifying the characteristics of excellent schools, the "How Schools Improve" study identifies important common elements outside the schools that made reform successful in the three countries studied. First, rural primary education was a political priority, and educational leaders and others with knowledge, skills and commitment conducted a strong team effort to carry out the reform. Second, the key common strategies to bring about changes were (i) to focus on changing classroom teaching practice and on the teacher mastery necessary to make the changes successful; and (ii) to provide the necessary supervision, in-service training, consultancies

and other staff development assistance necessary to change teaching practices (Dalin et al. 1992, p. 186).

A more recent study in Madagascar (World Bank 1994) corroborates some of the findings about the importance of school-level factors from the "How Schools Improve" study. Using case studies of twelve primary schools and the results of two representative surveys, one on the factors contributing to academic achievement and one on repeaters and dropouts, a team of Malagasy and World Bank researchers concluded that the most significant factors for the government to influence, according to definitions used in the research, were community participation, school leadership, and teacher guides and textbooks.

School improvement research identifies factors that facilitate the change process in schools, and, as the foregoing summary suggests, the research results often confirm the findings of school effectiveness research. In addition, this tradition provides insights into "how" to go about change. Therefore, it is disappointing that more research of this type has not been done in developing countries where the implementation of change is a major problem. In fact, it is a shortcoming of this study that we are not able to draw conclusions from the literature about what processes can effectively induce change in schools in Sub-Saharan Africa. Rather, the emphasis for now is on identifying the school-level factors that need to be changed.

Integrating the Lessons From School Improvement and School Effectiveness Research

The School Effectiveness and School Improvement research traditions look at the problem of how to make schools effective from different perspectives that complement each other. If educational planners and policy-makers are to make use of the findings that are common to both traditions, they need a conceptual framework that integrates them in a form that can be used for program planning. The International Congress on School Effectiveness and Improvement (ICSEI) provides a forum for the discussion of such a framework, but to date its discussions have been largely focussed on Australia, Canada, the Netherlands, the United Kingdom, and the United States.

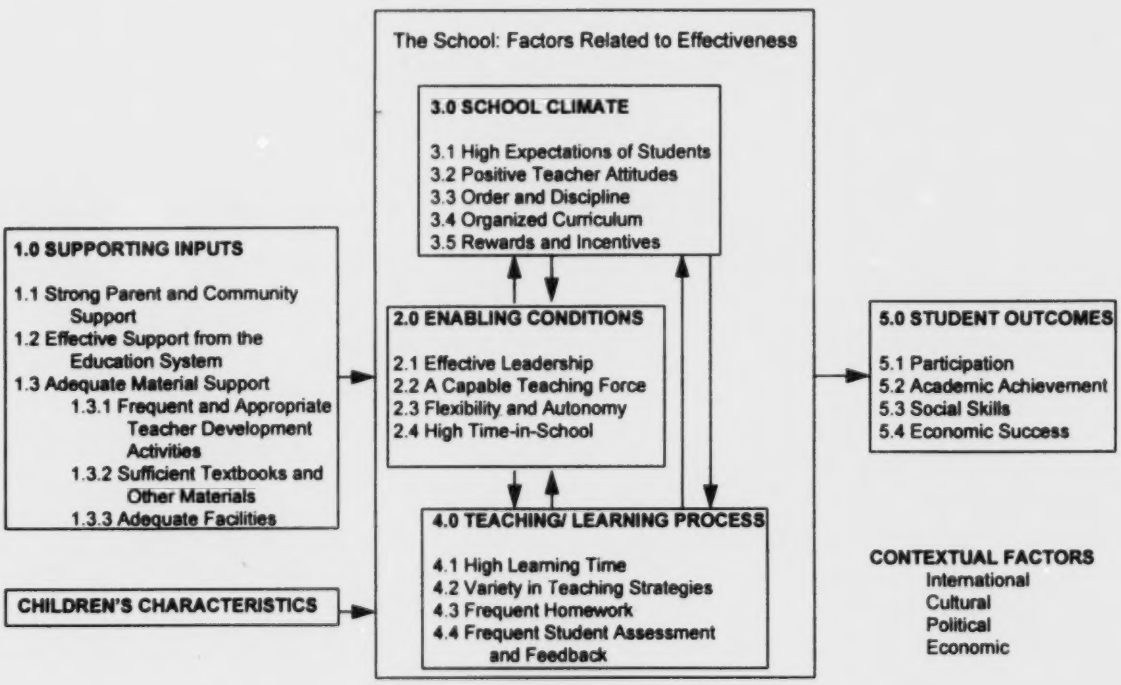
The rest of this section lays out a conceptual framework for considering the quality of education, one that has been developed with African primary schools in mind. Once the findings of both traditions have been combined in the conceptual framework, it will be used to compare the characteristics of effective schools with the design of recent projects supported by the World Bank to improve the quality of primary education in Sub-Saharan Africa.

A Conceptual Framework: Factors That Determine School Effectiveness

Based on the review of the research literature, the conceptual framework identifies eighteen key factors that influence student outcomes has been developed (Figure 3.1). The factors are divided into four categories -- supporting inputs from outside the school; and enabling conditions, school climate, and the teaching/learning process inside the school. All of them interact with each other and are themselves influenced by the context surrounding the school. It is their interactions,

the integration amongst them in a school, that determines a school's quality. The diagram summarizing the characteristics and their general relationship to each other in influencing educational outcomes is presented on page 22. For each of the factors, we have taken conclusions from the research to formulate operational definitions and to select indicators that will show how present each factor is in a school (see Annex 3). The details in Annex 3 define what we mean by the more general terms in Figure 3.1 when we use them throughout the paper. This section discusses the potential uses of the framework and its problems and limitations and then briefly describes each of the factors.

Figure 3.1: Conceptual Framework: Factors that Determine School Effectiveness



A key assumption of this study, supported by *Pathways to Change* (Verspoor 1989) and much of the research cited in the Bibliography, is that the school is the critical unit in bringing about change in educational quality. Still, as one of our collaborators has commented, in defining the quality of education children count, teachers count, and classrooms count. The conceptual framework combines all these possible units of analysis. Students are the subjects in the educational process, and the outcomes are defined in terms of their accomplishments. Teachers can be seen among both the Enabling Conditions and the School Climate factors. And classrooms provide the settings in which individual teachers work with children using the Teaching/Learning Process factors in the framework.

The conceptual framework has many potential uses. For example, it summarizes for planners and policy-makers how schools work. It can be the starting point for educational reform and program design, particularly through guiding the diagnosis of schools' needs. It can also provide a structure for school supervision, for monitoring of educational reform programs, and for designing teacher and schoolhead training programs (Heneveld 1994). The framework does not attempt to weight the various factors according to their importance or influence. Our review convinces us that, while different factor mixes must be determined, the most effective and efficient mix is so conditioned by local social and cultural factors that decisions should be made as close to the classroom as possible (Fuller and Clarke 1994).

We have used our own experience in education to help us order what the research says about the factors that determine school effectiveness, but a fixed definition of "quality" in education is not possible. If we were to start again, the resulting conceptual framework would probably be different. Recognizing that quality is dynamic, that it changes with time, means that a definition will vary in a school or system as its capacity and performance change. This recognition should encourage others to define "quality" for their particular school systems, or individual schools, as we have done generally for Sub-Saharan Africa. Chapter 5 presents examples of some countries in the region that have already prepared their own set of factors and their definitions. We will all need to revise our defnitions as we learn more and as education systems change.

As soon as a set of school characteristics are determined to define educational quality, there is a risk that they will become a checklist by which the planner or evaluator can evaluate schools. They may also continue to be considered as discrete from each other, still hindering the consideration of the school as a social system. This tendency to directly apply research findings to discrete, unrelated components of program design can be seen in Bank-supported projects in Sub-Saharan Africa that this study has analyzed. For example, the consistent research finding that the availability of textbooks is related positively to student achievement and the absence of textbooks in most African schools have led planners to inlcude textbook components in many projects (twenty-three of the twenty-six projects reviewed for this study). However, the supporting conditions in schools that would ensure their effective use -- pedagogic leadership, capable teachers, positive teacher attitudes, an organized curriculum -- are frequently lacking, as was described in the example in Chapter 1. Three points about the conceptual framework may help to avoid accepting the definitions of the characteristics of effective schools as a checklist of isolated characteristics that are "good:" (i) the school is the locus for making education effective; (ii) all the characteristics of effective schools are mutually reinforcing; and (iii) the proper mix of these characteristics and how they are nurtured and reinforce each other in a particular setting depend on the context in which the school operates.

Because of the importance of the context in which each school operates, the mix of characteristics that works in one setting may not necessarily be applicable in another. The literature on School Improvement efforts, in the United States particularly, offers many examples of

successful local change processes that have altered a school's character to improve student learning. Transferring these experiences to other schools in the United States, even in the selection of the school conditions to focus on, has been difficult. The danger of an inappropriate transfer of lessons learned is even greater when the generalizations that are drawn from these experiences in well-endowed education systems are to be considered for application to Sub-Saharan Africa.

In order to minimize the risks that the conceptual framework may be adopted blindly, it has been designed with these risks in mind. First, the characteristics are presented at a high enough level of generality to force reflection and adaptation for use in Africa. The definitions and indicators for each characteristic have been formulated to be relevant to Africa, but without a specificity that would preclude interpretation. For example, rather than suggesting that teachers teach five to eight hours per day, the indicators for full-time teaching in the definition of a capable teaching force is that "most of the teachers are present at the school for a full school day and teach most of the time" (Table A3.1.2, Annex 3). Second, contextual factors and student outcomes are identified, but they are not dealt with in detail. Both are crucial to an understanding of how and whether schools work, but dwelling on them in this study would detract from the focus on the input and process factors associated with school effectiveness.

Let us now turn to the details of the conceptual framework that are summarized in Figure 3.1. This figure presents each of the factors that have been selected as important to school quality and places them in a flow diagram. The rest of this section describes this framework and presents the definitions of what is meant by each of the factors. The definitions and indicators that will help identify them in schools are also presented in Annex 3.

The characteristics of effective schools that affect student outcomes, and the student outcomes they influence, are embedded in an institutional, cultural, social, and political context that greatly influences how school factors interact with each other and how effective a school can become. Institutionally, the nature of the administrative structure over the school, the level of democratization and professionalism in the system, its resources, and other factors condition how a school functions (Chubb and Moe 1990, pp. 26-68). In developing countries, including those in Africa, cultural and social norms influence the schools' functioning even more than in the the industrial countries because the school is in an imported institution. The community can be supportive or hostile towards the school. Ethnic, linguistic and social differences can constrain interaction among students and between students and teachers. Teaching methods, subject matter, and schoolhead:teacher and teacher:pupil relations are sensitive to these norms. Politics can also influence school quality by, for example, hampering the schools' operation during times of political strife or by groups in different regions in a country. All of these factor, external to the school, and others, condition how effective a school can become. Public policy therefore needs to pay attention to them. However, change in factors external to the school is not the subject of this report, so the conceptual framework does not look at them in detail.

As depicted in Figure 3.1, the following factors and definitions of them are critical in determining educational effectiveness. The numbering of the factors below corresponds to that of Figure 3.1 and Annex 3.

1.0 Supporting Inputs

1.1 *Strong Parent and Community Supports:*
From the literature, five categories of parent and community support that are considered relevant to Sub-Saharan Africa have been identified: (i) children come to school prepared to learn; (ii) the community provides financial and material support to the school; (iii) communication between the school and parents and community is frequent; (iv) the community has a meaningful role in school governance; and (v) community members and parents assist with instruction. The learning preparedness that parents and communities can provide include the availability of pre-schools, good child health (high nutrition levels and low morbidity and parasite rates), and evidence of directed cognitive stimulation at home (Lockheed and Verspoor 1991). Community material support can be in the form of money, construction materials, or labor (Dalin et al. 1992). The frequent communication between school and community in effective schools is mainly positive, such as at award days and parent days, and two-way, with parents often initiating contact with the school (Blum 1990; Joyce and others 1983). Effective governance involves, at least, parent/community advisors in school improvement efforts (Blum 1990). Finally, when there are skills and knowledge in the community relevant to the school's curriculum, community members serve as information sources, the audience for school academic activities, and/or assistants in classes (Blum 1990). The literature also includes some evidence that parental involvement in homework and written policies and procedures on community involvement may improve school effectiveness, but these are not included here as part of the definition of involvement.

In summarizing the importance in the United States of strong parent and community support, Purkey and Smith (1983, p.444) conclude that "our feeling is that parent involvement is not sufficient, but that obtaining parental support is likely to influence student achievement positively." We believe that, in Sub-Saharan Africa, this conclusion is also valid and that it extends to the community at large, though adults'different educational and socio-economic backgrounds may suggest different forms of involvement than in the United States.

1.2 *Effective Support from the Education System*:
Support to individual schools by the education system's management structure is important to enhance school effectiveness (Huberman and Miles 1984; Purkey and Smith 1983). The literature suggests that in terms of demonstrating its support, the system needs: (i) to delegate authority and responsibility for improvement to the schools themselves (Blum 1990); (ii) to communicate expectations and exert pressure where necessary for successful academic results (Levine 1990); (iii) to provide services to the schools to help them succeed, including information and training

regarding instructional practices and protection from political turbulence (Blum 1990; Huberman and Miles 1984); and (iv) to monitor and evaluate schools' academic performance and the efforts of school heads, particularly as instructional managers (Blum 1990; Dalin et al. 1992). The establishment by the system of clearly-defined policies for authority delegation and of expected student competencies are necessary to promote high academic standards.

1.3 *Adequate Material Support*:
The Conceptual Framework divides material support to schools into three categories which deal with: (i) the frequency and appropriateness of teacher development activities, (ii) sufficient textbooks and other materials; and (iii) adequate facilities. The literature strongly indicates that ongoing, relevant staff development activities are necessary if a teaching force is to be effective (Blum 1990: Dalin et al. 1992; Farrell 1989; Levine 1991; Lockheed and Verspoor 1991). This research suggests that adequate time and resources need to be set aside for teacher development, that staff members need to have a say in the content of activities, that skills learned should be practiced over time with follow-up sessions implemented where necessary, and that staff members should be encouraged to share ideas and work together. Changed attitudes and behaviors and new skills and strategies are the result of most in-service programs (Purkey and Smith 1983; Heneveld and Hasan 1989). In their study and review of educational systems in selected developing countries, Dalin et al. (1992), Farrell (1989) and Fuller (1989) found that local in-service training in the forms indicated have, particularly those that focussed on pedagogical skills, were key determinants for teacher mastery and student achievement. A relatively short pre-service training program followed by relevant, practical participatory in-service programs were highly recommended.

The impact of textbook use is far greater in African countries because of their scarcity compared with the abundance of textbooks available in industrial countries. The evidence is very strong that children in developing countries who have access to textbooks and other reading material learn more than those who do not have access (Farrell 1989; Heyneman, Farrell and Sepulveda-Stuardo 1981; Heyneman and Loxley 1984; Lockheed and Verspoor and associates 1991). Textbooks are the single most important instructional material and are particularly effective where teachers use teaching guides with them. The provision and use of paper, pencils, chalkboards, chalk, posters, filmstrips, and audiotapes also facilitate student learning (Lockheed and Verspoor 1991).

Other research suggests that school buildings, classrooms to comfortably accommodate reasonable class sizes, enough desks to seat all the children, libraries, clean running water and toilets are important determinants of the quality of schooling, particularly in developing countries (Dalin et al. 1992; Fuller 1986; Urwick and Junaidau 1991). For example, Harbison and Hanushek (1992, p. 103) found that "improved facilities are systematically benefical to student learning" in rural northeast Brazil when these facilities were defined as a hardware composite of classrooms, sanitation facilities, offices and storerooms, furnitures, and public utilities.

2.0 Enabling Conditions

2.1 *Effective Leadership:*

According to the literature, the school head must: (i) see that the resources are available to provide adequate support to teachers, sufficient learning materials , and an adequate and well-maintained learning facility; (ii) pursue high instructional standards through written policies, high expectations and management of the learning process; (iii) communicate regularly and effectively with teachers, with parents and others in the community; and (iv) maintain high visibility and accessibility to pupils, teachers, parents and others in the community (Blum 1990; Brubaker and Partine 1986; Carter and Klotz 1990; Chubb and Moe 1990; Dale 1990; Dalin et al. 1992; Davis 1989; Frederick 1987; Gibbs 1989; Hallinger 1989; Joyce, Hersh and McKibbin 1983; Levine 1990; Levine and Lezotte 1990; Lezotte and Bancroft 1985; Lockheed and Verspoor 1991; Smith and Andrews 1989; Steller 1988).

The improvement of primary education in African countries also requires school heads who articulate a vision of what their school should be like and demonstrate an energetic commitment to that vision (Manasse 1984; Steller 1988); who devote much of their time to the coordination and management of the instructional process; who have high academic expectations; who regularly communicate with staff, parents and others in the community; and who are highly visible and accessible in the school while sharing their responsibilities for its management (Dalin et al. 1992; Lockheed and Verspoor 1991).

2.2 *A Capable Teaching Force:*

The Conceptual Framework divides the characteristics of teachers in effective schools into two categories. There are conditions that the literature suggests make the teachers in a school capable of being effective, and there are the attitudes and behaviors they exhibit in their work. Attitudes and behaviors fall under the factors of the school climate and of the teaching/learning process (see especially Factor 3.2: *Positive Teacher Attitudes*). Among the conditions that define the capability of a school's teaching force are: (i) the teachers' mastery of the material they are supposed to teach (Huberman and Miles 1984; Lockheed and Verspoor 1991); (ii) the amount of teaching experience they have (Haddad et al. 1990); (iii) the length of time they have been in the school (Purkey and Smith 1983); and (iv) the extent to which the group is full-time in the school (Fuller 1986). It is expected that African primary schools, like schools elsewhere, will also be more effective if they have teachers who know the subject matter, who have experience, who are stable in their assignment, and who are assigned to work full-time in the school.

2.3 *Flexibility and Autonomy:*

The Conceptual Framework defines flexibility and autonomy as the school's level of independence in making decisions about how time and resources are used to increase academic performance. In effective schools, the schoolhead and teachers make decisions about timetabling, about how textbooks and other materials are used, on student assessment techniques, and on other school processes including teacher development and extra-curricular activities. Also, they should be able to draw on various constituencies for resources. Flexibility and autonomy in school management

and in the generation of resources for the school have been identified as correlates of effectiveness at both the school and classroom levels (Brookover and Lezotte 1979; Hunter 1979; Levine 1991, Purkey and Smith 1983; Robinson 1985; Rutter et al. 1979; Rutter 1981). African primary schools should also be more effective when such independence exists at the school level.

2.4 *High Time-in-School:*
The time spent in school, both in terms of hours per day and days per year, does contribute to varying student achievement, even when family background differences are accounted for (Farrell 1989; Fuller 1986; Haddad et al. 1990; Heyneman and Loxley 1983; Summers and Wolfe 1977). Children who spend more time studying in school tend to learn more (Farrell 1989). A distinction needs to be made between the established number of days and hours per day and the actual time that the school is in operation. In some settings, the policy on the school calendar and daily hours may require revision to have schools in session more. In others, the policy may be adequate but schools may remain closed often or they may shorten the school day, especially where a leaky roof closes the school on rainy days, teachers are absent for other work, or overcrowding requires double sessions. What is important, however, is not just the total time spent in school, but rather how that time is used. This second issue is addressed below in the *Conceptual Framework as High Learning Time* under the teaching/learning process (Factor 4.1).

3.0 School Climate

3.1 *High Expectations of Students:*
Most educators agree that "the behavior of children in school, especially their achievement in academic subjects, is partly a function of the social and cultural characteristics of the school social system," that is, the school's climate (Bookover et al. 1977, p. 9). There is particular evidence in the research literature that high staff expectations for all students to do well contribute to making an Effective School (Brubaker and Partine 1986; Chubb and Moe 1990; Frederick 1987; Joyce Hersh and McKibbin 1983; Levine 1990; Lezotte and Bancroft 1985; Purkey and Smith 1983; Robinson 1985; Scheerens and Creemers 1989; Steller 1988). In Effective Schools, the concept of the school as a place of commitment to learning is communicated clearly by the principal and teachers, and student performance is monitored regularly. Also, student assignments are sufficiently frequent and difficult so as to convey this high expectation and teachers'confidence in students' abilities, and confidence in students is reinforced by giving them many opportunities to take responsibility for school activities. These expectations translate into more positive self-concepts and greater self-reliance among students.

The success of these expectations should be observable in a school's recent academic record as compared to the national average. The few studies that have investigated whether schoolheads and teachers in developing countries who expect high achievement receive stronger commitment and performance from students whose self-concepts are positive suggest confirmation of the findings for industrial countries (Fuller 1986; Lockheed and Verspoor 1991).

3.2 *Positive Teacher Attitudes:*
Schools are also more effective when teachers have confidence in their ability to teach, care about teaching and about their students, and cooperate with each other (Chubb and Moe 1990; Duttweiler and Mutchler 1990; Huberman and Miles 1984; Joyce, Hersh and McKibbin 1983; Levine 1990; Purkey and Smith 1983; Shann 1990). These characteristics are reflected in the teachers' comfort in using learning materials and in trying new ideas, by low teacher absenteeism and tardiness, and in a high level of group involvement in planning teaching and in resolving whole-school issues. In African primary schools, it is expected that student achievement will be enhanced too by positive teacher attitudes, but teachers' general lack of subject mastery and of confidence in the ability to teach probably hinders the development of such attitudes (World Bank 1994).

3.3 *Order and Discipline:*
The patterns that have emerged from studying schools reveal that high achieving schools have safe, orderly environments which are conducive to learning. Classrooms and classes are well-organized and facilities are clean and in good repair. School rules and regulations are clearly articulated, are agreed upon by both teachers and students, and are fairly and equitably maintained. Also, positive behavior is reinforced, and students and teachers attend classes regularly and according to an established timetable (Blum 1990; Frederick 1987; Joyce, Hersh and McKibbin 1983; Lezotte and Bancroft 1985; Lockheed and Verspoor 1991; Purkey and Smith 1983; Robinson 1985; Scheerens and Creemers 1989; Steller 1988). Since order and discipline are an indication of the seriousness and purpose with which a school approaches improving student learning, a student's ability to learn in African primary schools should also be influenced significantly by this factor.

3.4 *Organized Curriculum:*
Effective Schools are student-centered and provide instruction that promotes learning based on students' learning styles (Duttweiler and Mutchler 1990). One contributor to effectiveness is a well-organized curriculum. According to the research literature, a well-organized curriculum emphasizes the acquisition of basic skills and is designed to ensure academic success by defining learning objectives that are matched to identified teaching strategies, available materials and an integrated sequence of topics across grade levels (Blum 1990; Frederick 1987; Joyce, Hersh and McKibbin 1983; Purkey and Smith 1983; Robinson 1985; Scheerens and Creemers 1989; Steller 1988; World Bank Policy Paper: Primary Education 1990). This organized curriculum should be reflected in a written schedule of work that all teachers in a school use to adapt the curriculum and available materials to their students' needs and to produce local teaching-learning materials.

Dalin et al. (1992) particularly emphasize the production of teaching-learning materials by the school. Lockheed and Verspoor (1991) support the importance of an organized curriculum for school effectiveness, but they caution that textbooks do not constitute the curriculum. In developing countries, textbooks and other instructional material are sometimes poorly designed, often have factual inaccuracies and problems with readability, and tends not to promote higher-order thinking skills. These points should be particularly noted by African educators seeking to reform the curriculum to make schools more effective.

3.5 *Rewards and Incentives:*
A school's culture is partly reflected in the way it chooses to recognize accomplishments (Purkey and Smith 1983). When schools publicly honor and reward academic achievement and positive social behavior, this encourages all students to follow a similar pattern. Effective schools have clearly-defined academic standards, and academic success is recognized through regular public rewards and incentives for achievement (Joyce, Hersh and McKibbin 1983). While this factor has not been clearly identified with effective schools in Africa, one can expect that rewards and incentives will reinforce a positive school climate there as well.

4.0 Teaching/Learning Process

4.1 *High Learning Time:*
High learning time refers to the amount of time a student spends on a learning activity during which he or she is achieving a high rate of success. This learning time can be maximized when classroom time is used efficiently. Teachers in effective schools waste less class time in starting and ending instructional activities; they select curriculum materials which are appropriate to student abilities; they emphasize academic instruction and active learning strategies; and they provide immediate constructive feedback to students (Berliner and Casonova 1989; Blum 1990; Joyce, Hersh and McKibbin 1983; Purkey and Smith 1983; Robinson 1985). Research from a variety of countries has shown that both the amount of time available for instruction as well as how well this time is used by students and teachers is consistently related to how much children learn at school (Lockheed and Verspoor 1991).

4.2 *Variety in Teaching Strategies:*
Student differences and learning needs can be better accommodated by teachers employing a variety of teaching practices (Hathaway 1983; Joyce, Hersh and McKibbin 1983; Levine 1990; Shann 1990). These teaching practices might include individual assignments with worksheets, class discussion, group work, explaining, drill-and-practice, asking questions, and cross-age tutoring. When available, teachers may also make use of interactive radio and/or programmed materials. An emphasis on higher order thinking is important. In his review of five studies in developing countries, Fuller (1986) found confirming evidence in four of these that when a teacher spent more hours preparing for class, these preparations raised the quality of instruction and improved student achievement. Lockheed and Verspoor (1991) suggested that, while the use of worksheets and homework is also effective in developing countries, in many cases the preparation of these requires additional material and out-of-class time which is often not available. Instead, they suggest an emphasis on small, cooperative group learning, on cross-age peer tutoring, and the use of interactive radio, where possible, as cost-effective alternatives. They also note that instruction such as drill-and-practice, asking questions that stimulate student thinking, presenting information in small hierarchical steps, having students repeat information and giving constructive feedback can raise academic performance.

4.3 *Frequent Homework:*
Assignments and the close evaluation of homework will boost student learning even in developing countries (Fuller 1986; Haddad et al. 1990). Homework implies to students that learning is more than just a classroom activity, and that independent learning is valued. When teachers check homework and provide students with constructive feedback they let students know that they care about their progress as well as the assessment of that progress. (Joyce, Hersh and McKibbin 1983). While the giving of homework is strongly recommended in African primary schools, this may be difficult to implement because of the lack of available out-of-class time, of materials to take home, or of light at home in the evening.

4.4 *Frequent Student Assessment and Feedback:*
Frequent monitoring of student progress in conjunction with prompt constructive feedback are factors that enhance student motivation and school effectiveness (Blum 1990; Brubaker and Partine 1986; Joyce, Hersh and McKibbin 1983; Lezotte and Bancroft 1985; Scheerens and Creemers 1989; Steller 1988). Monitoring student work helps teachers diagnose what students know and where further instruction is needed. These regular evaluation procedures and feedback should be an integral aspect of the curriculum. Research from developing countries demonstrating the effectiveness of close monitoring of student work and prompt constructive feedback confirms these positive results elsewhere (Arriagada 1981; Lockheed and Komenan 1989).

Conclusion

In this chapter, the findings of research from the School Effectiveness and the School Improvement traditions have been integrated to select and define those factors that we concluded determine the quality of primary education in Sub-Saharan Africa. The resulting Conceptual Framework summarizes this integration with definitions and indicators for each factor that have been derived from the literature. This work has been done with African schools in mind, but one must still apply this framework to the African school setting with caution because the amount of actual research in the developing world, and particularly in Africa, upon which the framework is based, is limited. However, if this limitation is recognized and the logic of the framework's development is accepted, the framework can be used to assess the potential efficacy of recent World-Bank-financed projects that seek to improve the quality of primary education in Sub-Saharan Africa. Chapter 4 uses the framework to make such an assessment for the designs of twenty-six World Bank loans to countries in the region.

CHAPTER 4: WORLD BANK LENDING TO IMPROVE THE QUALITY OF PRIMARY EDUCATION IN SUB-SAHARAN AFRICA

Introduction

World Bank lending for primary education has become a priority as the contributions of an educated population to development have been better recognized and understood. A recent study of the Bank's role in human resource development in Sub-Saharan Africa summarizes the history of the Bank's evolving commitment to education in general and its shift from investments in civil works to investments in all inputs to education; from a global policy to region-specific and, more lately, to country-specific policies; and from a focus on increasing the capacity of education systems to improving their quality (OED, World Bank 1993). The Bank's current policy towards lending for primary education is summarized in a policy paper that states, in its section on "Priorities for the 1990s," that Bank lending should evolve in four ways:

- Higher priority should be given to measures intended to increase children's learning and primary school completion;
- Support for the expansion of access should give explicit priority to girls wherever there are significant gender disparities in enrollment;
- The mobilization and efficient allocation of additional resources for primary education should be a central focus of policy dialogue and lending operations, especially in low-income countries;
- Operations should provide funding to support long-term primary development programs (World Bank 1990, p. 51).

The Bank's lending program for primary education in Sub-Saharan Africa has been evolving in these four directions. However, within the World Bank's Africa Region there is a continuing sense that the investments are not having the expected impact on schools and students. Why is the concern felt, and how justified is it?

This chapter examines the extent to which the original designs for ongoing operations in Sub-Saharan Africa successfully targeted the first of these directions -- increased student learning and school completion -- by focussing on the school factors that influence student outcomes. The study asked the following questions of a sample of project designs, as represented by the Staff Appraisal Reports and in the subsequent written and oral reports of Task Managers:

- In what areas, and how, have the designs of World-Bank-financed projects seeking to improve the quality of primary education responded to what is known about the characteristics of effective schools?

- Where attention to important characteristics is lacking, why aren't these characteristics clearly articulated and included in project designs?
- What are the implications of these findings for project design and implementation?

In order to answer these questions, the chapter describes a sample of twenty-six project designs that were analyzed, examines how each of the project designs responds to the characteristics of school effectiveness included in the Conceptual Framework described in Chapter 3, and draws conclusions about these project designs that may be helpful in future lending operations.

Characteristics of the Operations Analyzed in This Study

In order to make the study more relevant, the sample study of World Bank investments was limited to projects currently under supervision. This universe of education projects in Sub-Saharan Africa was canvassed to select those that specified improving the quality of primary education as an explicit and significant objective. Twenty-six operations in twenty-five countries (two projects from Malawi were included), from a total of about sixty approved and on-going education projects in the Region, were identified and included in the analysis.

The sample provides a good cross-section of projects in the Africa Region. It includes thirteen operations from Francophone Africa, nine from countries where English is the dominant international language (including Ethiopia and Somalia), and three of the Portuguese-speaking countries. Even though the sample was chosen to study primary education, only four of the projects focus exclusively on primary education (Cape Verde, Guinea-Bissau, Niger, and Nigeria). Most of the operations in the sample are specific investment credits, but ten of them are, by title, either sector adjustment or sector investment credits. Many of the other credits in the sample include policy goals as well direct investment objectives.

The projects studied range in size from around $5 million to over $100 million, but not all the funding was planned for primary education or for investments in factors that directly influence the quality of education. Annex 1 presents a list of the projects with their total funding and the amount and percentage of that total that was budgeted for primary education. Annex 2 summarizes the frequency with which different categories related to effectiveness were found in the projects.[3] The possible categories according to which each project were summarized and analyzed include:

- Community involvement;
- System support: supervision;
- System support: teacher development;
- Textbooks and materials;

[3] The summary table in Annex 2 presents the total number of projects that were judged to have paid attention to each of the categories influencing educational quality. The total differs somewhat from those reported in Technical Note No. 14 (Heneveld 1993) because further analysis of the SARs led to changes in the original judgements.

- Facilities;
- Effective (school head) leadership;
- In-school, in-service teacher training;
- Flexibility and autonomy;
- School climate;
- The teaching/learning process; and
- Assessment/examinations

Annex 2 also presents a summary of each operation's design for each of these categories of activity. The reader should note that this list of project components corresponds only roughly to the factors affecting school effectiveness that are defined in Chapter 3. Differences exist because the analysis of Bank project designs proceeded alongside the development of the conceptual framework, and the categories here reflect an early version of the framework. The definitions of the categories used to analyze the projects are consistent with the final version of the Conceptual Framework—And, as shall be seen, the analysis of the comparison between the factors affecting school effectiveness and the content of World Bank operational designs is revealing about how much attention has been paid to factors that are known to affect the quality of primary education.

The Projects' Response to the Characteristics of Effective Schools

Annex 2B provides a summary of how project designs have responded to the factors that are known to affect educational quality. This annex summarizes the detailed notes that were taken on each factor in each project design in the sample. Two general observations are important at this point. First, Bank projects have universally included an array of school input components: community support, supervision, teacher development, textbooks and facilities. However, none of the in-school factors appears in as many projects as any of the input factors. Only "effective school leadership" (fourteen projects) comes close to the number of projects having each of the input components. Most important, we were able to find noteworthy mention of school-climate in only three projects, and teaching/learning process factors, what goes on in classrooms, was not addressed directly in any of the twenty-six project designs.

Second, the details of project components as described subsequently and as summarized in Annex 2 reflect a tendency to view inputs as discrete quantifiable instruments (levels of inputs expected from the community, weeks of in-service training per teacher, numbers of textbooks and teachers guides, etc.) without taking into account how they will interact with other inputs, especially at the school level. This tendency to consider that the projects' learning materials, training programs, revised curricula, changed organizational structures, etc. will be effectively integrated at the school level without much forethought can be seen in the project designs' failure to consider the process factors that the research concludes contribute to effective education.

This chapter presents a discussion of each of the projects' components in terms of how they treat the factors that were defined in the last chapter. The chapter concludes with a summary of the

findings of this analysis, in terms both of how well the project designs took advantage of research findings on the characteristics of effective schools and of where attention to the factors has been lacking.

Community Support

As described previously, in good schools children come to school healthy; parents provide financial and material support; there is good two-way communication between the school and the community; and the community has a significant role in school governance. Evidence of this factor was found in twenty of the twenty-six project designs studied, though most of the plans for community support targeted contributions for school construction, rehabilitation, and maintenance. Thirteen of the projects include school construction or rehabilitation components that will involve communities and parent groups in site preparation, the supply of local materials, unskilled labor, and even full responsibility for construction. In the project designs for Burundi, Chad and Somalia, the communities were proposed to be fully responsible for construction with technical support provided by mobile construction teams, and in Mali a Support Fund was to be established with donor funding which was to provide matching grants to communities for school construction. In some countries, the community's responsibilities will include providing teachers' houses (Lesotho, Malawi), preparing the grounds and sanitary facilities (Burundi, Mauritania, Somalia), or just providing the local materials and unskilled labor to contractors hired to build the schools (Burundi, The Gambia, Guinea Bissau, Niger). In addition, five projects (Cameroon, The Central African Republic, Ghana, Mali and Niger) specified that communities will be responsible for school maintenance. In Niger, the establishment of this responsibility at the school level was to be supported by a maintenance manual, training of community members, and provision of a tool kit to the school. Where a rationale was provided for community involvement in providing school facilities, the Staff Appraisal Reports presented these material contributions as interventions that would increase resources going into education, not as mechanisms to bring the school and community closer together for higher quality education.

There are only a few examples of health and nutrition support in the projects studied, and none of these would rely much on community participation. The designs for the investments in Madagascar and Zaire specified the introduction or improvement of health education into the schools, and in Burkina Faso there were to be funds for micro-nutrient supplements and deworming tablets for children. The Ghana document also refers to an on-going feeding program for which it proposes that the charges to parents be tied to inflation. None of the project designs made any reference to improving communication between the school and the community nor was there any expectation expressed that community members and parents should assist in the education of their children by helping in the school.

Effective Support from the Education System: Supervision

In effective school systems, authority and responsibility for improvement are delegated to the school. The system clearly communicates expectations to the schools, usually through the

setting of expected learning outcomes and the criteria for a school to be effective. The system supports school staff by providing advice, training and resources; and schoolheads are supervised and students' academic performance is monitored regularly. In the twenty projects that were found to pay attention to supervision and support, almost all the attention focussed on equipping and upgrading the personnel who supervise schools and teachers. Fifteen of the twenty projects included in-service training components for the supervisory service, and the training aimed to cover such topics as, for example, "(a) personnel, financial, and school management; (b) educational administration and planning; (c) pedagogical support to teachers; and (d) academic supervision" (The Central African Republic, p. 10); "teaching methodology and classroom/school management practices" (Guinea-Bissau, p. 12); and "recent developments in supervision, teacher coaching techniques, teacher evaluation and monitoring of instructional activities" (Uganda, p. 12). Eight projects said they would include training in school management for the supervisors, but only the project in Guinea Bissau mentioned providing additional education on the content of the curriculum to supervisors. It is noteworthy that none of the projects included or referenced more detailed plans for the implementation of these in-service training programs, though a few SARs did include in their annexes a comprehensive overview of training plans for various groups.

In Sub-Saharan Africa, the facilities for providing supervisory support to schools and teachers are very limited or non-existent. Ministries of Education are not well-structured to deliver school-level services; the inspectors and pedagogic advisors are often stationed far from the schools under their charge, and transportation frequently is not available; and the number of schools for which each supervisor is responsible can be excessive. Some of the projects responded to each of these problems. The Cape Verde, Ghana and Somali designs included plans for giving a clear structure to, or reorganizing, the supervisory service. The Zaire project proposed to place supervisors closer to the schools, and Guinea-Bissau and Malawi planned to increase the number of supervisors. Eight of the projects included funds for purchasing transportation for the supervisors, from bicycles and motorcycles in Uganda to small four-wheel-drive vehicles in Mali. The Ethiopia and Mauritania projects include funds for constructing regional or district offices for supervisory units.

Even though the majority of the project designs would create better conditions for school supervision, they do not communicate expectations for performance in terms of student competencies and criteria that define effective schools. In all project designs, the goal statements for the education systems and their translation into system objectives remain very superficial, limiting the project designs' capacity to present measureable indicators of project success.

Support of Teacher Development

According to the research reviewed in Chapter 2, schools perform better to the extent that the education authorities outside the school provide support that includes "information and training regarding instructional practices." This support to teacher development can be pre-service teacher training for those who wish to become teachers or in-service training and assistance for teachers already in the system. There might also be training and support to head teachers so that they can

contribute to teachers' pedagogical development. This section looks at what the project designs in this study proposed to do to improve teachers' development at the system level and with-in individual schools.

At the system level, twenty-four of the twenty-six projects studied have components on teacher development. Eleven projects addressed pre-service teacher training issues, and twenty-two included components for the in-service training of existing teachers. Only five projects, all for pre-service training, include funding for construction, and four include research and planning to either restructure or revise the teacher-training curriculum. The many in-service teacher training components respond directly to what the research says will help make schools more effective. Table 4.1 summarizes the design for the in-service sub-components from representative projects in Burkina Faso, Burundi, The Central African Republic, and The Gambia. In general, in-service programs attempt to train large numbers of teachers for either or both of two purposes: to certify untrained teachers where they are numerous, or to improve classroom teaching directly. The analysis of the project designs in the study suggest that if certifying untrained teachers is the primary goal, the program will tend to be more academic and formalistic than if the goal is to improve instruction directly. For example, Burkina Faso and The Gambia's plans were for certification courses and they follow a set process of residential courses away from the teachers' schools with self-study in between the residential sessions. In-class work on improving teaching behaviors is not critical to either project. On the other hand, Burundi and the Central African Republic aim to improve classroom teaching directly over time by regular supervision and support to trainee teachers from supervisors and school heads, activities that are more associated with improvements in quality than are certification courses.

In-school teacher development activities were planned in eight of the projects (Burkina Faso, Burundi, Chad, Comoros, Lesotho, Madagascar, Nigeria, and Zaire). All eight projects presented in-school supervision as an outgrowth of system-led training initiatives for both teachers and schoolheads (see subsequent text) that would be financed by the credits, suggesting that the planners in each country felt that school-level pedagogic leadership needed to be strengthened. However, only two of the projects were strongly intentional about supporting teachers' professional growth within the normal operation of the school. In the Comoros project, school heads were expected to provide the practical supervision of the application of lessons taught through a correspondence course supported by three seminars during school holidays; and in Lesotho a training program for 200 school heads included the explicit assignment to mentor at least one of the untrained teachers who would be participating in a parallel in-service certification program. Four other projects (Burkina Faso, Burundi, Chad and Madagascar) mentioned in-school supervision as a follow-on activity to training that would occur for schoolheads, but no explicit provision or funding to support this work was provided. In two other projects (Nigeria and Chad) proposed changes in regulations were expected to stimulate improved school-level teacher supervision and in-service training by school heads.

Table 4.1: Summary of Designs of In-Service Teacher-Training Components in Selected World Bank Projects in Sub-Saharan Africa

	Burkina Faso	*Burundi*	*C.A.R.*	*The Gambia*
Target Audience	4,000 untrained teachers	5,000 teachers	120 supervisory staff and about 3,500 teachers and school directors	1,200 unqualified teachers
Implementing Agency	Directorates of Teacher Education and/or Primary Education and the Primary School Inspectorate	A cross-agency Education Activities Coordination Committee (CCAP)	National In-service Training Center and inspectors and pedagogic advisors	Gambia College of School of Education
Format	Over 14 months in each of 62 districts: 1. 3-week seminar 2. 12 months of self-study supervised by heads and inspectors 3. 3-week seminar 4. teacher certification exam	1. Training of teacher training school instructors 2. Training of regional and cantonal inspectors (2 times 40 days over two years) 3. Training of school heads (45 days) 4. Training of teachers through: • close classroom supervision • repeated one-day cantonal sessions • field monitoring • 55-day long course for each teacher	1. One-month course for supervisors 2. 3-week course for all teachers 3. Two more 2-week courses for all teachers 4. Activities supported by radio 2 times/week and by an annual local 2-day education conference	1. 20 weeks of residential courses during 2 summers and spring breaks 2. 20 weekend sessions during the school year 3. a self-study program to do at home
Content of Training	mastery of curriculum; teaching methods, school and classroom management student assessment	Teaching double shifts plus?	New teaching methods, environment, multigrade and double-shift teaching , revised curriculum, classroom practice	Teaching methods and delivery of the syllabi
Expected Results	Teacher certification	Teaching double shifts plus?	Better teaching; on-going in-service program	Basic Teaching Certificate
Effectiveness Criteria: 1. Supervisors provide info. 2. Supervisors help in classrooms 3. School head supervises practice	 Yes ? ?	 Yes Yes Yes	 Yes ? Probably	 No No No

In projects where there are many untrained teachers to serve, this review suggests that there needs to be a more conscious effort to incorporate activities that build permanent mechanisms for long-term support to teachers while helping those without certification achieve it. The project design for Lesotho, noted previously, provides an example of how this might be done. There, the government wanted to train 600 unqualified teachers and to improve the skills of 200 primary school principals. The principals' upgrading program includes, at its center, training in teacher supervision, knowledge of education, and knowledge and skills in teaching practical and core subjects. To reinforce the use of this training, participating principals were expected to provide guidance and assistance to at least one of the unqualified teachers in training. This integration of training to upgrade teachers' formal qualifications and of classroom supervision to improve the application of what is learned should lead to changed teaching behaviors. It should also build a longer-term commitment to the skills and attitudes of school leaders and practicing teachers that will make the education provided more effective.

Textbooks and Materials

The research evidence that the use of textbooks has a significant impact on student learning is considerable. Their impact is even better when there are supplementary reading materials and when teachers have guidebooks for the texts that describe what to teach, how to teach it, and how to assess student learning. However, eventual textbook use comes at the end of a long chain of events that is meant to put good textbooks in students' and teachers' hands. As summarized in the "Proceedings" of a Conference on Textbook Provision and Library Development in Africa, the book industry in Africa faces problems with respect to the availability of raw materials, with publishing and printing, with distribution, and with cost recovery (British Council 1992). Investments in textbooks for African schools have to pay attention to these issues of supply as well as to the classroom use of books.

Twenty-three of the twenty-six projects in this study included textbook components, fairly convincing evidence that the World Bank has heeded the research evidence that textbooks are important for student achievement. However, the planning in all of these projects has concentrated on the supply of books, and the project designs give little more than passing notice to questions of textbook use after the schools receive them. Table 4.2 summarizes how the project designs in this study dealt with the various issues related to textbook provision and use. Publishing, printing, and distribution all received significant attention in the projects. However, only about half of the projects make provision for book storage, either within the distribution network or at the school level; and only two of the projects make an explicit provision for supplementary materials for students. In terms of use at the school, the projects do well in considering the provision of teachers' guides (only four projects definitely do not include these), but only eight of twenty-two projects with textbook components allocate resources for teacher in-service training on the use of the books. Even more significant, not one project includes a specific reference to planning for in-school supervision of textbook use. Overall, it appears that the World Bank's programming is paying good attention to textbook supply issues, but that much less consideration has been given to ensuring their effective use in classrooms.

Table 4.2: Summary of Issues Covered by the Textbook Components in 26 World Bank Projects in SSA

		Supply Issues						*Use Issues*		
Proj.	*Country*	*Publishing*	*Printing/Purchase*	*Distribution*	*Storage*	*Cost Recovery*	*Supplementary Materials*	*Teacher's Guide*	*Inset on Books*	*At-School Supervision*
1	Cameroon	-	-	-	-	-	-	-	-	-
2	C.A.R.	T.A.	Purchase	x	Renovation	No	x	x	No	No
3	Guinea	14 titles	Both	x	No	x	No	No	No	No
4	Ethiopia	x	Printing	No	No	No	No	No	No	No
5	Somalia	44 titles ready	Both	x	School cupboards	Pilot	No	46 guides ready	No	No
6	Uganda	Preparation	Purchase	No	No	Revolving fund	No	x	No	No
7	Burundi	?	Printing	x	No	No	No	?	No	No
8	Comoros	x	Printing	Limited for exp.	No	No	No	For experiment.	x	No
9	Madagascar	x	Printing abroad	x	No	x	No	x	No	No
10	Rwanda	-	-	-	-	-	-	-	-	-
11	Zaire	No	Both	Selected sub-regs.	No	No	x	x	x	No
12	Ghana	x	?	No	No	x	No	?	No	No
13	Guinea-Bissau	x	Other donor	No	No	No	No	No	x	No
14	Nigeria	No	Purchase	x	x	Revolving fund	At local hq.	x	No	No
15	Chad	1 tchr guide	Purchase	x	x	No	No	x	No	No
16	Niger	44 titles in 5 subjects	Printing	No	Central & inspect store room	For consumables, not books	No	x	-	No
17	Burkina Faso	x	Local printing	x	x	School central scheme	No	x	No	No
18	Cape Verde	x	Print abroad	x	No	Revolving fund	No	x	x	No
19	Mauritania	24 titles	Printing some local	No	Central & regional	Revolving fund	No	x	x	No
20	Mali	About 11 titles	Print abroad	x	Central	x	No	x	No	No
21	The Gambia	x	Printing abroad	x	x	x	No	x	x	No
22	Botswana	x	?	x	No	No	No	No	x	No
23	Lesotho	-	-	-	-	-	-	-	-	-
24	Malawi	More of existing titles	?	No	No	No	No	?	No	No
25	Malawi	4 grades in 4 subjs	Printed abroad	No	No	No	No	x	No	No
26	Mozambique	-	-	-	-	-	Materials kits	-	-	-

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Table 4. Summary of the Primary School Construction Components of 26 World Bank Projects in SSA

(c = Classrooms; s = Schools)

			Construction			
Proj.	*Country*	*Total Existing Schools**	*Renovation/ Replacement*	*New*	*Total Helped*	*Compared to Existing Infrastructure*
1						
2	C.A.R	4,107c	760c	120c	880c	.21
3	GUINEA					
4	ETHIOPIA	6,200s		450s	450s	.07
5	SOMALIA	619s			120s	.19
6						
7	BURUNDI	1,008s		61s	61s	.06
8						
9						
10	RWANDA	18,400c	600c	2,000c	2,600c	.14
11	ZAIRE	12,000s			20s	0
12						
13	GUINEA-BISSAU	638s	324c		92s	.14
14						
15	CHAD	4,390c	1,000c		1,000c	.23
16	NIGER	6,500c	3,000c	750c	3,750c	.57
17	BURKINA FASO	7,322c	300c	1,200c	1,500c	.20
18						
19	MAURITANIA	2,740c	50c	250c	300c	.11
20	MALI	7,360c	1,670	275c	1,945c	.26
21	THE GAMBIA	224s	200c	600c	800c	?
22						
23	LESOTHO	2,843c		330c	330c	.12
24	MALAWI	15,000c			1,500c	.12
25	MALAWI		228c		228c	
26	MOZAMBIQUE	819c **	54c	206c	260c	.32

* Approximate in the late 1980s

** Maputo only.

Facilities

Though taken for granted in industrial countries, there is research evidence that links the availability of classrooms with reasonable class sizes, enough desks, libraries, running water and with the results of primary education. Since many African education systems lack these conditions in many schools and the World Bank is the largest donor for education, it is not surprising that the World Bank has contributed to these capital-intensive investments. Seventeen of the twenty-six projects reviewed include investments in school facilities. The number of classrooms or schools to be constructed and renovated in each project are summarized in Table 4.3, along with a coefficient that roughly indicates how the planned investment compares to the existing system. The magnitude of the Bank's contribution to the existing system is not that great except in Niger where the proposed project would build and renovate half as many classrooms as already exist and in Maputo, Mozambique, where the ratio is about one to three.

In fact, nineteen projects included construction components related to primary education, but two of them limited the construction budget exclusively to the teacher training institutions. By far the largest amounts were budgeted for new construction (eleven projects), as much for new classrooms at existing schools as for new schools, and for renovations (also eleven projects, but not the same ones). Four projects (Botswana, Burundi, Malawi, and Somalia) included funds for teachers' housing, arguing that housing was essential to teachers locating near their schools, especially in rural areas. Other projects included investments in latrines and offices for staff, but not water systems; and almost all of them include funding for desks. A few also consider the systems and funding for facilities maintenance, and another few include "kits of basic classroom supplies" (Mauritius) such as "a chalkboard, seats and desks for the pupils, lockable cupboard to store books and a desk and chair for the teacher" (Lesotho).

Almost all of the construction components in these projects had been designed to take advantage of community participation, from the leveraging of participation by a construction planning unit with mobile technical teams in Mauritania to just providing metal roofing sheets for roofless schools in Malawi. Most of the designs describe in some detail the government-community mechanisms, such as in Mauritania, that have been designed to allow for community contributions with some level of supervision and monitoring. Training for community people, the preparation and publication of construction manuals, and "low-cost" building designs are all included in numerous project designs. Overall, the projects with construction components appear to have paid attention to the basic investments that would contribute to school quality and to have attempted to engage communities in the provision and maintenance of their school.

Effective Leadership

As discussed earlier, effective schoolheads are highly visible and good communicators with people in the school and with their communities. They see that the school has the resources it needs to function successfully, and they have high academic expectations that are reflected in their attention to coordinating the instructional process in the school. The World Bank projects reviewed reflect a recognition of these multiple demands on schoolheads. Fourteen of the twenty-six projects included components to upgrade the skills of schoolheads (two others said this would

come after the institution-building for training that is in the project), usually by integrating it into a larger training plan for teachers and school supervisors. Most of these planned investments proposed to provide training in a mix of skills related to curriculum, pedagogical supervision, and management (see Table 4.4), though the training designs are not outlined in any detail in the Staff Appraisal Reports. The presentation in the Burkina Faso SAR provides a good example of this attention to the multiple roles of heads while focusing on pedagogy. In Burkina Faso, "the training program for school-directors and teacher supervisors would focus on school management, teaching methods (including multigrade and double-shift teaching), student assessment and evaluation, and teacher supervision." Also, some projects mixed the training of school heads with that of the teachers (Zaire, Nigeria) or the supervisors.

Table 4.4: Summary of Training Components to Improve Leadership of Primary School Heads, as Presented in Selected World Bank Projects in Sub-Saharan Africa

Project No.	*Number of Heads to be Trained*	*Proposed Duration of Training*	*Subject Areas of the Training*		
			Curriculum	*Supervision*	*Management*
2	845	3 weeks annually	Yes	?	?
5	120 heads 120 Asst. heads	1 month annually over 3 years	Yes	Yes	Yes
7	540	45 days	No	Yes	Yes
8	250	1 week annually	Yes	Yes	No
9	All heads	?	?	Yes	No
10	660	7 weeks in 5 yrs.	Yes	Yes	Yes
11	All heads	1 wk/grp of 20	Yes	Yes	No
14	All heads	not specified	Yes	No	Yes
15	600	1 month	No	Yes	Yes
16	1250	?	Yes	No	Yes
17	2000 + 200/year	2 weeks	Yes	Yes	Yes
20	1,000	2 weeks	No	Maybe	Yes
23	200	3 yrs. w. 4 on-campus sessions and field work	Yes	Yes	Yes
26	120 principals 240 deputies	2 3-day seminars in each of 3 yrs.	Yes	Yes	Yes

Most of the projects propose only to train a portion of the schoolheads, presumably because of funding limitations. In those countries where all of them are to be trained (Madagascar, Zaire, Nigeria), a cascade approach of trainers-training-trainers down to the local level was envisioned. However, the credits did not seem to budget adequately to implement the training for the number of people proposed after the credit-funded program development was complete.

Where there was funding for implementation, residential seminars for a fixed period of time, usually between one week and one month, were the main means proposed to improve leadership. There was very little planned follow-up in schools; and rarely were policy and administrative changes proposed to enhance the pedagogical status of schoolheads.

The fourteen projects that included a component to improve school leadership paid attention to the variety of roles played by an effective schoolhead, and they focussed on the educational roles of the head, especially in those that integrated the schoolheads' training with that of teachers or of the local supervisors. However, the dominant mechanism chosen (residential finite training courses) probably would not have much impact on actual pedagogic leadership in the schools unless it was backed up by support and supervision in the field. The project documents show little recognition of this need, the Lesotho design being a notable exception.

The Lesotho project provides the most comprehensive program design to improve school-level leadership, mixing in it both residential study and practical field experience. According to the Staff Appraisal Report:

> The program would take three years with two groups of 100 participants. During the first year, which consists of two on-campus courses and two half-year periods of field work, the head teachers would improve their own teaching skills and study the materials which would be used to train an unqualified teacher (also being trained under the credit with a mix of on-campus and field experiences). During the second and third years, which would consist of three on-campus courses and two one-year periods of field work, they would study supervision skills and apply these at their school while guiding the unqualified teacher (p. 19).

Flexibility and Autonomy

The review of the twenty-six Staff Appraisal Reports found fourteen projects that included elements to increase decentralized flexibility and autonomy in education systems. All fourteen project designs sought to streamline local administration, improve supervisory services for schools, reduce fraud, and generally devolve authority and responsibility for educational management to local education authorities. For example in Ethiopia, Pedagogical Centers in the 106 awrajas "are being encouraged by devolution of a number of technical functions to provide school supervision, coordination, in-service teacher training, program evaluation, assistance in curriculum modification and development and use of teaching aids, research and other operational support services to schools." Similarly, the large Nigerian project includes training for state and local education authorities to improve their management of the system, but this training was not conceptualized as an integral element in the enhancement of individual schools' autonomy. In fact, not one of the projects explicitly targeted increasing school-level flexibility and autonomy by empowering schools, and providing them with the means to make decisions on timetables, on how materials are used, on student assessment techniques, on teacher development activities, and on extra-curricular activities. In sum, though these fourteen projects sought to decentralize some authority for education to local authorities, they did not respond to the research finding that a school's academic

performance may improve if there is an increase in the school's independence to decide how time and resources are used.

School Climate

The five factors in a school's climate that seem to affect students' academic achievement are:

- High expectations that students will do well;
- Positive attitudes of teachers towards their work, the students, and themselves;
- Order and discipline in the school's operation;
- An organized curriculum: clear learning objectives matched to teaching strategies and materials; and
- Rewards and incentives for students

None of the twenty-six Staff Appraisal Reports discussed these attitudinal factors that influence school effectiveness in terms of encouraging them in individual schools. Instead, "teacher motivation" was occasionally mentioned as a systemic problem, with terms of service and training considered as areas for action; and curriculum reform, always directed from the center, features prominently in many projects. Also, none of the training programs for teachers or for school heads included these factors as topics to be covered during training.

However, credits for Burundi, Cape Verde, and Guinea-Bissau included policy changes that it could be said were aimed at improving the climate of primary schools. The Burundi project sought to increase the student-teacher ratio (though this might have a negative impact on climate), to reduce the number of substitute teachers and non-teaching staff (including underutilized teachers), and to increase promotion rates in grade 1 and for all grades. Similarly, automatic promotion was to be introduced in Cape Verde and in Guinea-Bissau and multi-grade teaching in Guinea-Bissau. While these changes might be helpful,, there is no indication that World Bank projects have considered the attitudinal factors internal to a school that provide the climate for effective student learning.

Teaching/Learning Process

The conceptual framework for this study divides the in-school factors that determine school quality into three groups: School Climate, Enabling Conditions, and Teaching/Learning Process. The teaching/learning process factors that come from the research on school effectiveness are high learning time, variety in teaching strategies, frequent homework, and frequent student assessment and feedback within the school. None of these factors is considered in the twenty-six Staff Appraisal Reports that were reviewed. The only process factors that could influence the teaching/learning process are those already identified in the section on School Climate: changed student/teacher ratios, multigrade classes, automatic promotion.and double shifts. While it may be argued that these policy-related changes are appropriate for discussion in the Staff Appraisal Report and that the in-school factors can be left to be included in the detailed training designs, the fact that

they are not addressed in the principal project design document suggests that the teaching/learning process was not central to the discussions during the preparation of the projects.

Assessment and Examinations

Twelve projects among the twenty-six studied included investments in improving assessments and examinations. However, only four of these projects included some indication that the in-service teacher training activities of the project would help teachers improve their classroom use of assessment and tests as instructional tools. And it is at this level that the research suggests that this factor can have a significant impact in student learning. Also, the four Staff Appraisal Reports that refer to student evaluation as important only mention it as one of the topics to be covered in the in-service teacher training program. For example, the Burkina Faso documents lists "student assessment" as one of the topics that teachers will be trained in; the Rwanda project mentions assessments of teaching and its outcome"; and the Gambia and Nigeria projects include "continuous assessment" as a topic to be covered in in-service teacher training programs. As was observed generally for staff development, these general references to what will be covered in training programs is all that one can glean from the SARs about the planned substance of training.

On the other hand, all twelve projects that address this factor present in some detail the plans to establish or improve national examination systems and assessment procedures for diagnosing system performance. These investments will go towards the "establishment of a National Examinations Board" (Somalia), reinforcement of the management of the examination system (The Gambia, Malawi, Niger, Rwanda), or design of improved tests to better measure normed academic achievement (Cape Verde, Guinea-Bissau, Malawi, Mali, Nigeria). The school effectiveness and school achievement literature do not offer much evidence that these system-wide assessments are an effective way to improve student learning, even when examination results are reported back to schools (though experience in Kenya does suggest such a link). In sum, the project designs directly address the issue of assessing system performance and overall student achievement. However, they do not focus on helping classroom teachers improve their use of assessment and evaluation as a teaching tool.

Discussion of Findings

Using the Conceptual Framework presented in Chapter 2, this chapter examined the extent to which the designs of twenty-six World-Bank-assisted projects in primary education in Sub-Saharan Africa responded to what is known about the factors that determine the quality of educational outcomes. The analysis leads to two major general conclusions: First, the project designs address many of the factors that are known to affect educational outcomes, suggesting that the research on effectiveness has had an influence on the designs. Second, the project designs tend to focus on input factors -- textbook supply, teacher training courses, curriculum reform, national examination systems -- and tend to ignore the process factors -- school-level autonomy, school climate, the teaching/learning process, and pupil evaluation and feedback -- that characterize effective education within schools. The assumption that selecting the right mix of inputs will inevitably lead to changes in student performance must give way to the realization that an integrated approach that combines inputs, process, and climate in individual schools is the

key to improving the quality of education for learners. This section discusses these two general conclusions.

Table 4.5 summarizes the frequency with which the different factors were found in the twenty-six projects (See also Annex 2). Supervision (twenty-three projects), Teacher Development (twenty-three), and Textbook (twenty) components were found in twenty or more of the projects, more frequently than Facilities components. The next most frequent components were Community Support (nineteen) and Facilities (seventeen) which tended to go together as governments sought to engage communities in contributing to the education systems' infrastructure. Fourteen projects included activities related to School Leadership and Flexibility and Autonomy, twelve of the fourteen sharing both these components, which suggests that they may complement each other. Twelve projects included attention to Assessment and Examinations. But, as we have seen, only four of these projects respond to the classroom-based definition of this factor that the research suggests contributes directly to effectiveness. Finally, the most significant classroom- and school-related factors of In-School Teacher Training (eight), School Climate (three), and Teaching/Learning Process (zero) received by far the least attention in the project designs. This frequency distribution of project components across the sample suggests that *governments and the World Bank have been concentrating on system-wide measures that respond to policy decisions and large-scale programming that serves system needs more directly than school needs.*

Table 4.5: Number of World Bank Projects Addressing Selected School Effectiveness Factors (N=26)

Factors	*Number of Projects*
Supervision	23
Teacher Development	23
Textbooks	20
Community Participation	19
Facilities	17
School Leadership	14
Flexibility & Autonomy	14
Assessment & Exams	12
In-School Teacher Training	8
School Climate	3
Teaching/Learning Process	0

That said, the array of interventions within each project suggests that planners have consciously attempted to invest in a combination of inputs that most influence educational outcomes. More projects sought to support supervisory, teacher development, and textbook activities than school construction; and most projects encouraged increased community participation. In reading through the individual project designs one gets a sense of the planners attempting to link these components, with a special focus on making materials effective through staff training and support. In their integration of components, the projects provide the seeds, if not the fruit, of a sectoral approach to improving primary education.

However, the more detailed designs of project components related to each of the factors that have been studied add strength to the conclusion that the preparation of these projects slighted the planning of how the inputs will be mutually reinforcing within schools to maximize impact on the quality of what happens between teachers and children. A summary of the proposed activities related to each factor will make this point very clear. *Community support* activities in these projects emphasize contributions of money, material or labor to improve a school's infrastructure, with a few projects also attempting to ensure that children's health and nutritional needs are dealt with in collaboration with parents. Changes in governance of the

school that would seriously share authority between the government and the community are not featured in any project, nor is much made of the need for frequent and effective communication between the school and the community.

The project designs that include a strengthening of *supervisory services* concentrate on the logistics of training off-site and on transport and housing for supervisors with only passing reference, if that, to defining what supervisors will encourage to be done in schools to improve student outcomes. Similarly, of the twenty-three projects that include *in-service teacher training* components, only eight of them planned in-school training activities and reference to the planned content and methods for the training were very limited. The rest had all programmed strictly residential programs away from the schools during school vacations.

For *textbooks*, Table 4.2 graphically summarizes the project designs' focus on the supply of textbooks without much attention to in-service training in book use (only eight of twenty-three projects explicitly included this), and none of the projects mentioned in-school supervision to see that the books are used, even though there is ample anecdotal evidence in the region that many teachers do not use new books often or effectively.

At the next level of frequency, the projects that attempt to strengthen *School Leadership* and to increase *Autonomy and Flexibility* also fall short of considering carefully the lessons that researched experience provides. As with teacher development, the preponderance of activities to train schoolheads were to be done in residential courses with little practical in-school follow-up, and only a couple of projects mentioned the regulatory changes that were needed to enhance the authority and prestige of school heads. Also, as was shown previously, even those countries that planned to increase autonomy and flexibility only planned to extend it as far as the regional and local education authorities. No project presented plans for a significant increase in the individual school's autonomy, just as none planned to give meaningful authority to communities.

The *Assessment and Examinations* components in twelve projects were mainly directed at reforming or improving national systems for testing students and evaluating the education system's performance. Only four project designs addressed the research-based school-level need to improve classroom evaluation of, and feedback to, students. Finally, no project addressed explicitly and directly the defined characteristics of *School Climate* and the *Teaching/Learning Process*. The only interventions that could be said to address needs in these most local, and hardest to measure, of factors affecting quality were proposals regarding changes in student/teacher ratios, promotion rates and class groupings—all quantitative measures that are susceptible to system-wide policy pronouncements.

If each project is looked at as a whole, the lack of reinforcement among factors at the school level within a project becomes even clearer. The Nigeria primary education project design is representative of this shortcoming. The design makes a national body responsible for both textbook preparation and the design of teacher training materials. However, in-service training would be planned and delivered by the states, and there was no sign that the training would be timed to make direct use of the textbooks. In addition, in-service training for

headteachers and for educational officers appeared to be a repetition of the content material taught to teachers, to which would be added some management skills (resource management for headteachers and identifying training needs and organizing seminars for education officers) without a commitment or design for in-school follow-up to these training activities. Under a section on "institutions involved" in the annex of the SAR, responsibilities for the national, state, and local education agencies are listed, but there is nothing on the responsibilities of schools in the upgrading program.

The project design for Lesotho included elements that suggest the kind of school-level program integration that can help the inputs have a significant impact on student learning. As noted, the project proposed to upgrade 600 unqualified primary teachers and 200 school principals. The principals' three-year training course would consist of two on-campus courses and two half-year periods of field work each year. During the field work the principals would be expected to improve their own teaching and to use the supervisory skills they learned in their course to mentor at least one of the untrained teachers enrolled in the teaching upgrading course. Additional project integration, and greater school-level impact on quality, could have been expected if the implementation of what the principals and teachers' learned in their in-service programs were to be concentrated in the isolated rural schools at which the project was to build 330 new classrooms. The Staff Appraisal Report did not suggest that the in-service training would contribute directly to the effective use of the new classrooms, though that may have occurred during implementation.

Overall, a closer look at the planning done for the twenty-six projects reinforces the conclusion that *the closer the factor was to the life of the school and to what touches the children directly, the less likely it was to be planned for explicitly in these projects assisted by the World Bank.*

CHAPTER 5: IMPLICATIONS AND RECOMMENDATIONS

Introduction

This report has compared a selection of World Bank project designs for improving the quality of primary education in Sub-Saharan Africa with world-wide research findings on school effectiveness and school improvement. This comparison was stimulated by the observations in *Pathways to Change* (Verspoor 1989) that less successful World Bank projects in primary education neglect implementation at the school and classroom level and that World Bank projects in Africa had been particularly disappointing in this respect. Based on the foregoing analysis of World Bank project designs and the field experience that has accumulated while the analysis was being done, this chapter recounts experiences and presents suggestions about program designs and processes that will encourage school-based programming to improve the quality of primary education. It also offers recommendations for how governments and donors, particularly the World Bank, can improve the consideration of school-level factors in educational programming. First, describes how the Conceptual Framework can be used to define outcomes and school characteristics that can guide efforts to improve education and that lend themselves to the identification of indicators of quality in a given system. Then, the chapter provides examples from Madagascar, Senegal and Swaziland[4] of how these materials have been used to design school-based projects while building local capacity and ownership. Finally, it offers five recommendations for changing World Bank procedures and operating styles. Even though this discussion is about the World Bank's programming in education, the experiences, lessons and suggestions that are described apply equally to governments and other donors who plan and implement efforts to improve the quality of primary education in Africa.

On the one hand, while education projects supported by the World Bank do focus on access and efficiency objectives, when quality is a central theme and factors that affect quality are invested in, the projects target the strengthening of those factors (textbooks, teacher training, student evaluation) mainly in the system that supports schools, teachers and children, not in the schools themselves. Even with the attention to the factors that research indicates are important, the limited amount of time that Bank staff and consultants spend in schools makes a school-based approach difficult. Also, the Bank often values the quick production of a technically elegant report more than a project design grounded in local experience so that differences in

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[4] The authors have also used this approach with officials in Uganda, teachers in Kenya, inspectors in Malawi, and over 100 teachers, schoolheads, inspectors and managers in Guinea. Also, Economic Development Institute (EDI) seminars have introduced the approach to teams of senior educators from sixteen African countries (in three seminars) and to educators in Asia, the Pacific and Latin America. However, since these have been mostly training efforts that may have raised awareness but have so far produced limited operational consequences, they are not described in the body of the text.

technical skills between representatives of the Bank and local counterparts and time pressures inhibit serious collaboration between World Bank staff and their local counterparts.

On the other hand, these problems in the donor-client relationship in programming for education have been acknowledged by the World Bank, by other donors, and by African educators (World Bank 1993a; Donors to African Education 1994). Recent changes in World Bank policy seek to improve attention to issues of implementation, including greater participation in project development (Colletta and Perkins 1995), increased local ownership of project designs (World Bank 1993b), and a more holistic "sector approach" to strategies for improvement without sacrificing concern for the economic implications of investments. This chapter demonstrates how, based on the preceding analysis and using the Conceptual Framework from this study, programming to improve primary education in Sub-Saharan Africa can take advantage of past experience and build on current experimentation.

The Design of School-based Reforms

Earlier in this paper, the quality of education was defined as a change in the environment in which students learn so that this change produces "detectable gains" in their learning. In order to design such changes, it is necessary to have an operational definition of *both* what constitutes learning and what characteristics in the "environment" contribute to that learning. Put simply, if one is clear about what it is students are to learn and about what is needed to help them learn it, it should be possible to design improvements that will produce learning gains. However, *none of the twenty-six project designs that was reviewed had clear operational definitions of what was being sought for the students' learning environment, and none included definitions of the knowledge and skills expected of a child when he or she leaves primary school.* But, as has been discussed, *the general categories of what is needed* -- community involvement, supervisory support, books, capable teachers, an organized curriculum, effective teaching methods, and sound evaluations -- *are addressed in most Bank project designs.* However, the learning objectives for students do not explicitly inform the choice of investments, and *the actual investments address system needs -- the supervisory service, the examinations system, the teacher training colleges, etc. -- without keying off of the conditions that are desired in the schools.*

Based on the realization that project designs must reflect the system's learning objectives and desired characteristics of schools, Ministries of Education in a number of countries have formulated statements of learning objectives and definitions of desired characteristics of schools using the Conceptual Framework.[5] In Madagascar, for a sector study on the quality of primary and secondary education, *profils de sortie* ("exit profiles" of graduates) were defined for primary, junior secondary and senior secondary schools based on the behavioral objectives that had been prepared for each subject in the syllabus. When a similar exercise was undertaken in a seminar in Senegal, Ministry of Education officials realized that there were six official documents,

[5] There has been enough experience helping these countries in Africa think through their system's objectives and desired characteristics of schools for a generalized process to have developed. It is summarized in an as yet unpublished very short *Facilitators' Guide* prepared after a seminar in Guinea by the participants with assistance from two Malagasy trainers and one of the authors. The *Guide*, in draft form, is available from the authors.

including a *loi d'orientation*, dated between 1986 and 1993, that summarized learning goals for primary school students. Using these documents as a basis, the officials integrated them into summary lists of learning and access objectives against which to measure improvements in the education system. Also, a Quality Group in the Swaziland Ministry of Education that is planning an educational reform to improve the quality of primary education held two forty-person seminars to obtain inputs on learning goals and desired school characteristics for primary education and then reviewed their synthesized version with about half of the participants from the two seminars. Annex 4 includes the summary lists of the objectives from all three countries.

Annex 4 also includes a list of the factors that each country selected and defined as important for a primary school to be effective *given its own context*. In Madagascar and Senegal, detailed definitions, with indicators for each definition, were also prepared, and Annex 4 includes examples of selected factors from the more lengthy set of definitions. The Swaziland list of definitions and indicators is included in full. These examples demonstrate the specificity and clarity about expected school-level conditions and outcomes that can be obtained by African educators when they reflect on their experience in their own education systems.

It should also be apparent how a statement of learning objectives and a definition of characteristics of effective primary schools can be used to inform the design of a sub-sectoral approach to educational reform. Using the statements such as the Malagasys, Senegalese and Swazis have produced, components of an investment program can be formulated, shaping each of the components so that they contribute to these desired system and learning outcomes. For example, as in Swaziland, if classroom teachers are expected to be able to ask both lower and higher order questions, the curriculum guidelines for each subject, textbooks (and supporting teacher guides), pre-service and in-service teacher training, and supervision must all contribute to helping teachers be able to ask such questions, especially in the subject areas most closely related to the system's educational objectives. Also, as the designs of these components of a reform take shape, planners can define indicators of progress according to the outcomes selected. They can collect base-line data and they can establish monitoring mechanisms to follow developments over the life of the reform. Finally, before the reform is finalized, it can be reviewed component by component and as a whole to see how well the pieces reinforce each other to achieve the operational objectives that were set for children and for schools.

The definition of quality that a statement of learning objectives and desired school characteristics provides also relates to issues of access and efficiency. The definition of quality must consider what will make the school more attractive to parents and children by respecting the context in which the reform is undertaken. The contextual issues to consider are related to economic conditions, public resource availability, poverty, religion, ethnicity, and gender, all of which condition school enrollment, attendance, and performance. For example, Swaziland's desire to vary learning activities among group work, role plays, drama, and debates might be an unattractive objective in a society that does not value socialized learning, especially if there are religious strictures on boys and girls interacting informally.

The examples offered here provide evidence that it is possible to define observable criteria for the in-school factors related to the teaching/learning process and to the school's

climate, the areas that have been neglected in planning World Bank primary education investments in Sub-Saharan Africa. Without these elements included in the design of projects, it is unlikely that a school-based approach to improving the quality of education can be realized. It is not that these areas should become the instrumentalities to be directly invested in, but planners have to have the full range of school-level characteristics and targeted learning outcomes in mind when they design the activities and expenditures that will be included in an educational reform. If not, as was found in the project designs analyzed previously, the probability of an investment maximizing successful change is reduced because important considerations that influence children's learning will have been ignored.

The Preparation of School-Based Reforms

The Conceptual Framework for this paper is derived from a review of research on what makes education effective, most of the results coming from developed countries. If that information is to be put usefully to work to design interventions in Sub-Saharan Africa, it has to be informed by the experience of African educators, and the only providers of this experiential expertise are Africans themselves. Therefore, to design effective interventions for improving school quality, preparations must be done by the local people, with their choices of outcomes and means to achieve those outcomes informed, but not determined, by the experience from elsewhere. A planning process that is based on local experience -- and controlled locally -- requires that certain operating principles of World Bank project preparation be revised: local commitment and capacity, not a target date for presentation to the World Bank's Board of Directors, should determine the timetable of preparations. Detailed technical design specifications with ambiguous implementation strategies, especially at the school level, should be replaced by clear descriptions of problems and proposed strategic solutions that consider explicitly how children's learning will be influenced. The Task Managers, staff and consultants from the World Bank must be convinced and patient enough to allow all planning decisions and planning of implementation to be done by those who will implement the project. This means listening more and defining tasks and counselling counterparts instead of actually doing the substantive work. Also, it is critical that the outsiders remind the local planners of the big picture, of macro-economic realities in the country, of the overall strategy for the sector, and of lessons from elsewhere.

Madagascar, Swaziland, and Senegal provide first examples of how the preparation of school-based educational reforms can be done under these changed operating principles. In Madagascar, a Technical Group formed in the Ministry of Education developed the statement of educational objectives and the definition of the characteristics of effective schools that have been presented. These materials were then used to conduct field work and prepare qualitative case studies on twelve primary schools and twenty-four junior and senior secondary schools. The twelve in-depth primary school cases provided the basis for comparisons with national statistics on education and with two national sample surveys, one on the determinants of achievement and one on the causes of wastage in student flows. Then consultations among educators and stakeholders in Madagascar about the research results led to the prioritization of those factors that are currently most critical to the quality of education in the country today. Besides the report on the case studies (UERP 1994), this work resulted in the publication of a World Bank sector

study (World Bank 1994) that identified community participation, school-level leadership, and textbooks and teacher guides as the highest priority factors for emphasis in the next few years.

The results of the study in Madagascar have been discussed in detail within the Ministry of Education, with the World Bank, and with other governmental agencies that finance and support formal education in Madagascar. Based on the report and these consultations, an entirely Malagasy working group has drafted a strategy for the sub-sector of primary education that will be *centrée sur l'éleve, basée sur l'école, avec une demarche ascendante* ("centered on the child, based at the school, with a bottom-up approach"). This strategy is being refined and activities planned to revitalize the existing strategy for improving primary education in preparation for new funding requests to donors, including the World Bank.

In Swaziland, the Ministry of Education has decided to establish a comprehensive primary school improvement program that will build on a current effort to improve school management and to introduce continuous assessment into the primary schools. The materials from Swaziland that are presented in the last section are guiding the design of this program. A Quality Working Group within the Ministry started by holding two seminars with about eighty local education officers, schoolheads, teachers and community leaders to collect their suggestions about what the learning outcomes from primary school should be and about what educational factors influence these outcomes. They then synthesized the results from the seminars' working groups, specifying and refining the indicators presented in Annex 4, and held another seminar with about half of the original participants to obtain feedback on their synthesis. In addition, village-level consultations have been held in seven communities with pupils, parents, teachers, and schoolheads. This input is incorporated into the final version of the characteristics of an effective school. The Ministry of Education is now using these results as the guide in the selection and design of activities for which changes in the system and funding will be sought.

A current World Bank credit to Senegal is supporting the pilot implementation of a *Fonds de Développement Scolaire* (*FDS*). The *FDS* is designed to provide grants to individual schools to help them improve their quality and/or to increase female participation. As was seen in the previous discussion of program designs, the Senegalese Ministry of Education has identified expected learning outcomes from primary school and defined indicators for factors that they think affect school quality and female participation. In 1994, all the inspectors and schoolheads in the first pilot district of Diourbel were introduced to these factors and their relationship in a series of workshops conducted by Ministry personnel and one of the authors. The project proposal forms that schools used to apply for funds were designed to use the system's objectives to help identify expected project outcomes based on current school performance and to relate these to the factors that the community feels will most effectively and efficiently achieve these objectives. Proposals from seventy schools have been received and evaluated by the Ministry of Education. Most of them present clear statements of needs and their probable impact on objectives, using the framework of outcomes and priority school factors already identified by the Ministry. However, the actual proposed use of funds in many of the original project proposals focussed on creating income-generating activities to be managed by the school with the promise that the revenues from these activities would be used later to invest in the factors selected. The

proposals have had to be revised so that the funding requests respond directly to the clear needs that the proposals have already identified, and the first awards are expected to be made in mid-1995.

At the same time, the Senegalese framework of objectives and factors will be used by the *Institute National d'Etude pour le Développement de l'Education (INEADE)* to conduct an evaluation of this program's implementation in twelve of the first schools to receive rewards. Using a qualitative field methodology similar to that used in the Madagascar sector study, the research team will prepare a baseline case study of each school, including testing in French and Mathematics in the second and fifth grades. The researchers will then follow the baseline study with three observational visits over the next eighteen months and then a final site visit at the end of the second year that will include another round of tests in the same grades. This study is expected to provide conclusions on the design of the program, on its implementation, and on the factors that seem to have had the most impact on female participation and student achievement.

In all three examples, the work has been done by local educators with the World Bank providing some training, advice and counsel. The process has been slow in Madagascar and Senegal. In Madagascar, it took three World Bank missions just to convince the Ministry of Education to form a technical group to conduct the sector work, and subsequent planning and conduct of the field work took almost a year. In Senegal, assistance to the *FDS* has also occurred over more than a year, with operational advice on the pilot implementation of the awards mixing with training and consultation on the formulation of the materials being used to guide project planning and the evaluation. In both cases, there has been some, but limited, pressure from within the World Bank to progress at the Bank's normally speedier pace, not the local Ministry's. Furthermore, the materials developed in each country are not perfect, and the research designs for the sector work in Madagascar and the evaluation in Senegal have many flaws. But they are locally designed and owned by the groups that are responsible for the research. Finally, the technicians involved in each country have needed help in adjusting their conceptual work as educators to respond to the political and economic realities of each country, to primary education's relationship to secondary and higher education within the sector, and to the more profound meanings of the definitions of factors derived from research elsewhere and presented in the Conceptual Framework. That these processes have prospered with World Bank encouragement and participation is testimony to the Bank's commitment and ability to encourage greater local participation and ownership.

Recommendations

This study has concluded that the designs for projects supported by the World Bank to improve the quality of primary education have addressed factors that contribute to quality, but they have not focussed sufficiently on the school-level dimensions of those factors and have ignored factors strictly internal to the school. This report proposes that, in order to improve on this performance, it is necessary to define carefully what should happen in a good school in each system and then to build a program around those objectives. To accomplish this, improvements are needed on two fronts.

On the one hand, before a reform program is designed in a country, the *government* and the donors who are prepared to support primary education need to *make operational the expected outcomes for students and the priority conditions in schools that need to be strengthened if these outcomes are to improve*. This is a local task, based as much on experience of what works and what's possible in a given system as on formal research; and if participation in this exercise is broad and backed up by field research, as in Swaziland, the results will probably be more realistic. If the outcomes and priority conditions of schools are defined with the specificity that they have been in Madagascar, Senegal and Swaziland, they will provide the basis for the monitoring of change during the implementation of whatever program is decided upon. We recommend this preliminary step in planning for all sectoral interventions, if only because it provides the base upon which to *establish a system for monitoring implementation and the impact of changes*. Given our definition of quality -- change in both student outcomes and the learning environment -- examinations and annual statistical reports on student flows will not suffice to track changes in educational quality.

On the other hand, since this study has considered the design of investments supported by the World Bank, the results of the study suggest recommendations for improvements in the Bank's processes and skills. These include creating greater flexibility in timetables, making more frequent but shorter visits to the field, improving staff knowledge and skills about school-level factors that influence educational outcomes, developing the consulting and advising skills of staff, and including definitions of quality (learning outcomes and school characteristics) in Staff Appraisal Reports. The rationale for each of these recommendations for the World Bank is as follows:

Allow for more flexibility in the timetables for developing a loan.
Some of this exists in the frequent rolling forward of due dates, but this is mainly allowed when other circumstances -- political unrest in the country, slow disbursement on a current credit, bunching of presentations to the Board of the World Bank, etc. -- support delays. Instead, mechanisms should exist for Task Managers to lay out a slower timetable in the beginning and then to justify any, and presumably less frequent, delays by showing how they will enhance participation and ownership.

Make shorter more but frequent visits to the field.
The current format for visits to the field for policy discussions and project development is two to four weeks in-country during which significant substantive work is done, much of it often data collection and data processing. Frequently, in fact, World Bank staff and consultants are doing the work of their counterparts. If staff visited the field for shorter periods, only a week or so, but more frequently, visits would necessarily focus more on identifying problems in work done in the visitor's absence, advising on solving these problems, and planning work to be done between this visit and the next one. This change would require either more staff resident in the region so that more frequent travel would be affordable or more countries being covered by each visitor so that stopovers could be combined beyond the one or two countries that staff now have responsibility for. To be successful, shorter visits would probably also require more cooperation and shared responsibility among staff working on the same activity in a country.

Improve staff knowledge and skills with respect to in-school factors.
World Bank staff do not, as a rule, spend much time in schools observing them in operation. Many of the Task Managers lack the experience to do this productively since they are not educators, and incentives do not exist for spending time this way (to say nothing of the travel and accommodation discomfort that field visits may occasion). Training in the factors affecting school quality, particularly the in-school ones, coupled with a higher expectation of school visits would help overcome this problem. There may also be a need to add educators to the regular staff, not just consultants, to working on education projects. The World Bank's Economic Development Institute (EDI) has already contributed significantly in Africa to this recommendation through its seminars on educational reform. These seminars have brought together senior educators from African countries and World Bank Task Managers for just this combination of training and field visits. If staff were more aware of what goes on in schools, and understood the importance of a school's climate and learning processes, more attention would be given in project designs to ensuring that inputs are used effectively.

Improve staff skills and incentives for consulting and advising when in the field.
On mission, most World Bank staff concentrate on finding solutions to the technical, or managerial, problems in the education system. This often means that Bank staff and consultants are able to find convincing technical solutions to complex local problems, even though the causes of these problems are usually only partly technical. Staff would be more successful in stimulating participation and creating ownership, and in preparing implementation plans, if they spent more time as advisors for this analytic work than as technical problem-solvers. However, they have little explicit preparation as advisors and counselors. And, again, incentives within the Bank encourage documenting the right solutions to educational problems rather than helping the local leadership and technicians find their own, albeit less technically complete, solutions. A staff training program that raised awareness of the skills required of successful development workers (Fry and Thurber 1989), coupled with greater appreciation by the World Bank for Task Managers whose counterparts do most of the substantive work, would help change the current tendency to concentrate on technical work while in the field.

Expect all Staff Appraisal Reports (SAR) to include a statement of expected learning outcomes and a selection of priority school characteristics, with indicators, that the investment is expected to improve.
The examples from Madagascar, Senegal and Swaziland demonstrate that Ministries of Education can produce such statements, and they provide a concrete reference on system objectives for inclusion in the policy for the education sector. Beyond providing a definition of what "quality" will mean in a given educational context, it should be expected that the SAR will also show how each project component will contribute directly to improving the targetted school-level conditions and student outcomes. Further the project design should address the issue of how the components will reinforce each other to maximize the investment's impact on learning outcomes and on changes in the environment of the schools.

These recommendations reflect both the findings of this study and the World Bank's general call for changed relationships with its clients. The examples from Madagascar, Senegal and Swaziland show that change is possible and that it does produce multiple impacts. Only by

following through on recommendations such as those in this report can it be expected that African governments will become more able to articulate sectoral strategies and that donor involvement with them will increase their capacity, ownership, and results on the ground.

Conclusion

Over the past thirty years, World Bank lending for Education in Sub-Saharan Africa has evolved along numerous dimensions, as summarized in a recent internal evaluation.

> From the application of a global policy to elaboration of region-specific, and increasingly, country-specific policies; from providing one critical input -- mainly civil works -- to providing more and more of the whole package of inputs required to make a project work; from a focus on expansion of the system to an increasing focus on improvements; and from little involvement in policy issues (other than what was necessary for a given project) to considerable involvement, including not only sector-wide but non-sector issues when important for sector operations (World Bank 1993a).

This report demonstrates the World Bank's continuation of these trends as it learns more about what will improve primary education in Africa. The twenty-six project designs analyzed here have stressed providing a package of inputs; the packages respond to country-specific needs and focus on improving the quality of education without losing sight of the need to accommodate additional students; and they have moved further towards allowing sector-wide approaches to respond to different sub-national needs. These trends need to continue. The lessons from research on school effectiveness and school improvement, as summarized in the Conceptual Framework of this paper, show that schools count even more than current lending patterns recognize.

Therefore, the evolution of the World Bank's and other donors' lending program for primary education in Sub-Saharan Africa needs to continue towards (i) a greater focus on what happens inside schools; (ii) an even richer package of considerations of what makes education successful at the school level, and (iii) sectoral policies that empower schools and communities to control better the education of their children. This study proposes that clear definitions of expected learning outcomes and of the factors in a school that contribute to those outcomes are pre-conditions for planning and implementing school-based reform. The Conceptual Framework has already been experimented with in enough countries with teachers, schoolheads, inspectors, planners and decision-makers to confirm its efficacy as a tool for helping them, at whatever level of the system, to provide clear definitions based on their experience as educators. The governments' role is to take the initiative in deciding what education's objectives, priorities, and reform strategies should be. It should be the donors' role to facilitate the process of reflection, definition and planning, not to directly participate in the substance of it. However, in order to be better facilitators, many World Bank operational staff, and donors'representatives, particularly need to understand the internal dynamics of schools better and to improve their skills as advisors and facilitators. Given the learning that has already occurred, there is ample reason to expect that these challenges can be met successfully.

ANNEXES

ANNEX 1. STAFF APPRAISAL REPORTS REVIEWED

Staff Appraisal Reports (SAR) Reviewed With Amounts (in US$ millions)

	Report No	*FY*	*Country*	*Project*	*Project Cost*	*Primary Cost*	*% of Cost for Primary*	*Loan Amount*	*Primary Lending*	*% of Lending for Primary*
1	P-4281-CM	86	CAMEROON	EDUC. & VOC. TRAIN.	$61.20	19.5	32%	$30.10	$8.32	28%
2	6835-CA	88	C.A.R.	EDUCATION III	$20.70	$12.62	61%	$18.00	$13.39	74%
3	P-3478-GUI	83	GUINEA	EDUCATION II	$30.20	$6.27	21%	$11.00	$2.18	20%
4	4948a-ET	85	ETHIOPIA	EDUC.VI	$109.60	$21.04	19%	$70.00	$15.57	22%
5	8180-SO	90	SOMALIA	EDUC REHAB	$32.50	$22.94	71%	$26.10	$24.32	93%
6	7387-UG	89	UGANDA	EDUC.IV	$27.90	$10.26	37%	$22.00	$10.26	47%
7	6913-BU	88	BURUNDI	EDUC.SEC.DVPT	$37.50	$15.76	42%	$31.50	$11.92	38%
8	6039-COM	87	COMOROS	EDUCATION II	$8.80	$2.69	31%	$7.90	$2.69	34%
9	8026-MAG	90	MADAGASCAR	EDUC SECT REINF	$48.60	?	?	$39.00	?	?
10	9136-RW	75	RWANDA	EDUCATION I	$9.00	$7.34	82%	$8.00	$6.58	82%
11	9145-ZR	91	ZAIRE	EDUCATION III	$37.00	$17.94	48%	$21.00	$13.95	66%
12	P-5244-GH	90	GHANA	EDUC SAC II	$88.00	?	?	$50.00	?	?
13	7131-GUB	88	GUINEA-BISSAU	EDUCATION	$4.60	$3.39	74%	$4.30	$3.64	85%
14	8714-UNI	91	NIGERIA	PRIMARY EDUCATION	$167.20	$158.40	95%	$120.00	$120.00	100%
15	7244-CD	89	CHAD	EDUCATION	$25.20	$20.23	80%	$22.00	$18.89	86%
16	6115-NIR	87	NIGER	PRIM EDUC DEV	$26.20	$14.33	55%	$18.40	$12.19	66%
17	9119-BUR	91	BURKINA FASO	EDUCATION IV	$58.00	$31.00	53%	$24.00	$16.03	67%
18	6844-CV	88	CAPE VERDE	PRIMARY EDUC UPGRADING	$5.30	$1.85	35%	$4.20	$3.27	78%
19	7213-MAU	89	MAURITANIA	EDUC.SECTOR RESTRUCTURING	$37.40	$12.69	34%	$18.20	$6.17	34%
20	P-5010-MLI	89	MALI	EDU SEC CONSOLIDATION	$56.20	$22.37	40%	$26.00	$10.48	40%
21	8359-GM	90	THE GAMBIA	EDUC SECTOR CREDIT	$21.20	$14.32	68%	$14.60	$10.47	72%
22	5748-BT	86	BOTSWANA	EDUC.IV	$44.00	$12.64	29%	$26.00	$7.03	27%
23	5020-LSO	85	LESOTHO	EDUC.IV	$13.00	$5.40	42%	$10.00	$5.56	56%
24	6428-MAI	87	MALAWI	EDUCATION SECTOR CREDIT	$34.00	$18.84	55%	$27.00	$15.86	59%
25	7734-MAI	90	MALAWI	EDUC.SEC.II	$40.50	$13.87	34%	$36.90	$24.65	67%
26	7084-MOZ	91	MOZAMBIQUE	EDUCATION II	$63.80	$34.50	54%	$53.70	$35.39	66%

Amounts to be devoted to primary education cannot be determined from the Staff Appraisal Report because this project is an adjustment operation.

Source: PHREBASE, ESP, The World Bank 1992.

ANNEX 2A. OVERVIEW OF THE PROJECT DESIGN COMPONENTS BY PROJECT

Country	Project	Community Involvement	System Supervision	Support Teacher Dev.	Textbooks & Materials	Facilities	School Training	In-service Teacher Training	Flexibility & Autonomy	School Climate	Learning Process	Assessment/ Examinations
1 CAMEROON	EDUC. & VOC. TRAIN.	x		x		x						
2 C.A.R.	EDUCATION III	x	x	x	x	x	x		x			
3 GUINEA	EDUCATION II		x	x	x	x						
4 ETHIOPIA	EDUC.VI	x	x	x	x	x	x		x			
5 SOMALIA	EDUC REHAB	x	x	x	x	x	x		x			x
6 UGANDA	EDUC.IV		x		x				x			
7 BURUNDI	EDUC.SEC.DVPT	x	x	x	x	x		x	x	x	x	
8 COMOROS	EDUCATION II		x	x	x		x		x			
9 MADAGASCAR	EDUC SECT REINF	x	x	x	x		x		x	x		
10 RWANDA	EDUCATION I	x	x			x	x					x
11 ZAIRE	EDUCATION III	x	x	x	x	x	x		x	x		
12 GHANA	EDUC SAC II	x	x	x	x							x
13 GUINEA-BISSAU	EDUCATION	x	x	x	x	x			x	x		x
14 NIGERIA	PRIMARY EDUCATION		x	x	x		x	x	x			x
15 CHAD	EDUCATION	x	x	x	x	x		x	x	x		
16 NIGER	PRIM EDUC DEV	x	x	x	x	x	x			x		x
17 BURKINA FASO	EDUCATION IV	x	x	x	x	x	x		x	x		x
18 CAPE VERDE	PRIMARY EDUC UPGR			x	x							x
19 MAURITANIA	EDUC.SECTOR RESTR	x	x	x	x	x		x		x		
20 MALI	EDU SEC CONSOL	x	x	x	x	x	x			x		x
21 THE GAMBIA	EDUC SECTOR CREDIT	x		x	x	x						x
22 BOTSWANA	EDUC.IV				x	x						
23 LESOTHO	EDUC.IV	x		x		x	x		x			
24 MALAWI	EDUCATION SECTOR CR	x	x	x	x	x						x
25 MALAWI	EDUC.SEC.II	x	x	x	x	x						
26 MOZAMBIQUE	EDUCATION II			x	x	x	x					
	No. of Projects with Some Attention to Each Component	19	20	23	23	20	16	8	14	2	1	11

ANNEX 2B. SUMMARY OF PROJECT COMPONENTS

	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch Head Trng) 6	Flexibility & Autonomy (Decentrals.) 7	Assessment/ Exams 8
1	CAMEROON/ 3CAMPA053	Pilot maintenance program involving Parents Assn	n.a.	Expansion of the physical facilities of three training institutions to increase teacher projection	n.a.	Construction and equipping of three Teacher Trng Institutions	n.a.	n.a.	- o -
2	CAR/ 3CARPA015	Contracted construction with PTAs and communities providing local inputs, transfer responsibility for regular maintenance and minor repairs to local communities	In-service training for primary school inspectorate focused on personnel, financial and school mgt., educational admin. and planning, pedagogical support to teachers and academic supervision. Project would provide transportation for regular inspection.	Year 1, training of inspectors and pedagogical advisors to conduct training at regional centers. Year 2, beginning of training at regional centers focused on rural skills, re-inforced by radio broadcasts, corres. in-service training course and a pedagogical liaison bulletin.	430,000 textbooks and teachers' guides to facilitate one book per two pupils. Books distributed to schools for loan to students under improved storage conditions and new regulations.	Introduced a phased regional program for about 880 classrooms of renovation and replacement using low cost design and construction techniques based on the use of local bldg materials and labor.	Three-week in-service training annually for school directors and inspectors combined with INSET for teachers.	Provision of training at regional centers in Project Year 2, 3, 4 to all inspectors, pedagogic advisors, 84% of school directors, and 58% of primary school teachers.	- o -
3	GUINEA/ 3GUIPA014	n.a.	On-the-job upgrading and familiarization of primary school inspectors with new teaching materials and textbooks to enable them to carry out pedagogical supervision.	Conduct study to plan development of adequate, equitable and effective teacher training program	Production and distribution of about 1,218 textbooks and teacher training guides during life of the project.	Consolidate teacher training institutes (13) through reduction of number and provision of facilities, equipment and other inputs to improve quality and increase outputs.	n.a.	n.a.	- o -
4	ETHIOPIA/ 3ETHPA046	Self-help in school construction with materials supplied by SIDA; IDA funds for contracted construction in poorest settings.	Support to Awraja Pedagogical Centers which provide supervision, in-service teacher training, program evaluation and other instructional support.	In-service program during summer to upgrade untrained teachers, construction of new primary teacher training institute and expansion of the Kotobe College of Teacher Education.	Support for textbook materials production, writers, curricula materials, and science kits.	450 four-class primary schools; construction of training center in Addis Ababa, expansion of the Kotobe Teacher College, and construction of 10 Awraja Pedagogical Centers.	- o -	Awraja Centers (186) throughout country provide supervision, coordination, teacher training, program evaluation and other instructional support.	- o -

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	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch.Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
5	SOMALIA 3SOMPA063	New Community Educ. Associations (CEAs) contribute: (i) to supply drinking water to school tank; (ii) to do site clearance, landscaping, new site fencing, watchman facilities, access and internal roads; (iii) to provide recreational facilities; and (iv) experimental mobile building teams to train villagers and oversee new construction by them.	(i) Development of administrative structure for primary school inspection; (ii) development of in-country capacity for training inspectors; and (iii) provide offices and transport for inspectors	In-service training of 1,500 teachers (1.4) of the current teaching force in a two-year program.	1.6 million student textbooks and 100,000 teachers' guides and teacher training materials for the training program.	Construction/ rehabilitation of 105 primary schools in three regions with community participation. Construction of staff houses, 57 headmasters' offices, 315 latrine blocks.	Upgrading of 300 headmasters and inspectors in a one-month course focused on the new primary school curriculum, instructional supervision, and school management.	Upgrading of the central and regional inspectorate, improved logistics for inspectorate and development of administrative framework for operations.	Establishment of a National Exam. Board to formulate policies relating to exams; evaluate the standard and procedures for exams and select members of the exam. panel. The project would support design, analysis and administration of examination.
6.	UGANDA/ 2UANPA038	n.a.	Strengthen institutions responsible to monitor education activities. Introduce inspectorate to recent teacher coaching techniques, teacher evaluation and monitoring of instructional facilities; provision of mobile equipment; seminars and workshops at district and regional levels.	n.a.	Continued supply of textbooks and instructional materials began under the third project to 3400 schools, vast majority not supplied under third project.	n.a.	n.a.	Strengthened inspectorate to facilitate regional and district supervision of schools and teacher support.	n.a.
7	BURUNDI/ 3BUIPA034	Site selection, site preparation, and collection of local construction materials by communities for 55 new schools; 3/4 of these to be constructed by community with assistance from MOE School Construction Unit; increase parents' contribution.	Establishment of regional coordinating committees, training support, and annual seminar for regional inspectorate and primary school headmasters. Strengthening the role of inspectorate, teacher trainees and headmaster in teacher support.	Upgrading about 5000 primary school teachers through in-service training focused on teaching skills and subject matter knowledge. Involve on the job under guidance of headmasters; one week seminar at inspectorate level; and three months upgrading course at primary teacher training college.	Textbook and teachers' guides; strengthening the Regic des Production Pedagogiques which is responsible for editing, printing and distributing educational materials to the schools.	Provision of 55 new rural primary schools and 6 urban ones; rural school construction to be led by communities.	Training of 540 headmasters and/or school principals to improve ability to provide teacher with pedagogical and administrative support.	Establishment of special regional coordinating committee comprising: inspector, local administrators from the Governorates and primary teacher trainers from the Teacher Trng. Colleges. The committees would be responsible for; (i) reorganization of teacher training; (ii) monitoring of school administrative function.	n.a.

	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch.Head Trng) 6	Flexibility & Autonomy (Decentralis.) 7	Assessment/ Exams 8
8	COMOROS/ 3COMPA009	n.a.	Training of 35 pedagogical advisors in pedagogical innovation, improved teaching methods and use of curriculum and strategies and provision of motorcycles.	Upgrading of 2000 underqualified teachers focused on teaching skills and subject matter knowledge. Training would be divided in three parts: (i) one year correspondence course; (ii) two one-week seminars; (iii) six-week upgrading during summer vacation; with school heads trained to provide assistance at seminars and on-site training and supervision during the year.	Limited distribution of textbooks for experimentation and possible changes. Provision of teachers' guides adapted to local conditions. Books to be distributed would be based on newly adopted program and curricula.	n.a.	Training for 250 school principals focused on pedagogical innovations, improved teaching materials, use of new curricula and strategies for teacher training seminars.	n.a.	n.a.
9	MADAGASCAR 3MAGPA049	Integration of nutritional, environmental, and population education into school curricula.	Strengthening the regional and local structures for supervision by: (i) increasing number of inspectors and senior education advisors to 220 and 450, respectively; (ii) training 35 senior advisors recruited at Level I to Level II, promotion of good teachers to position of inspectors/advisors and provide local training for this; (iii) training inspectors, education advisors to implement in-service training program.	Pre-service: rehabilitation of facilities, provision of vehicle and operating costs to enable six teacher training colleges provide a two-year program with an annual output of 100 per institution. In-service: the training program to be prepared by the Pedagogic Unit will upgrade the skills of Level I teachers by a three-level integrated program; (i) on-the-job training under the guidance of head teachers; (ii) six-week training course at 64 training centers under the direction of inspectors and education advisors; (iii) permanent monitoring by education advisors and headteachers.	Establish and strengthen a text-book publishing unit within the pedagogic unit to manage the process of creating, adapting and publishing text-book and teachers' guides. Several options for a cost recovery scheme, under consideration include; (i) sales of books at production cost to parents; (ii) sales of books to school cooperatives at reduced cost per unit; (iii) distribution of books to students on a loan basis with books remaining property of Min. of Educ. Arrangement for storage, distribution and cost recovery scheme will be studied under Phase I of this project.	n.a.	In-service training of inspectors who will in turn give INSET to the 13,200 school headmasters to enhance their roles in monitoring teachers, on-the job training and conducting training at local levels.	Decentraliza-tion of teacher in-service training.	n.a.

	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch.Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
10	RWANDA/ 3RWAPA053	Communal Council of Educ. would implement construction and furnishing of classrooms using funds provided from the Primary Education's funds to be established under the project.	Upgrade the competence of prefectural inspectors in all aspects of pedagogical management as well as knowledge, skills, and methods for resource management.	Pre-service: Upgrade qualification of 60 professors at teachers colleges. In-service: Upgrade 3500 unqualified teachers and recycle 3000 underqualified teachers.	n.a.	2,000 new classrooms to be financed by Primary Educ. Fund which provide funds to communes and monitors construction.	Total of seven weeks of training over the life of the project aimed at professional skills and teaching methodologies, classroom observation, supervision and leadership.	Delegation of more responsibilities and authority to the prefectoral level.	n.a.
11	ZAIRE/ 3ZAIPA077	Promotion of basic health, nutrition, hygiene, environment and family planning knowledge.	Train supervisors in the use of textbooks as a teaching tool at the regional level.	In-service; (i) Training supervisors in the use of books as teaching tools; (ii) Training teachers in multigrade teaching techniques, and textbook use, with school heads providing on-site supervision through mandated supervision meetings with teachers.	Provision of textbooks and teachers' guides in one sub-region on a pilot basis. Rein-force DEPM and strengthen editing capacity of MEPSP (Cellule Edition)	Construct 20 multigrade classrooms in selected locale, rehabilitate one building on teacher training college campus; and rehabilitate MEPSP offices in Kinshasa.	Training of headmasters on regional basis in textbook usage by supervisors of schools.	Restructuring of the Primary Education Unit and other units to reflect regional dissemination of training.	n.a.
12	GHANA/ 3GHAPA063	Preventive school maintenance with rewards as incentives; Parents Teachers Assn. feeding charges and book user fees to be lined to inflation.	Improved support and accountability for supervisors to monitor the educational reform; change title and place closer to schools to strengthen pedagogic role.	Revise TTC curriculum; provide regular in-service training; all untrained teachers to be certified or terminated by 1996.	Make teacher guides in all subjects for all grades available to all basic (and secondary) teachers.	n.a.	n.a.	n.a.	Develop and implement standardized achieve-ment test to random sample of Grade 6 students in all schools and publicize results.
13	GUINEA-BISSAU/ 3GUBPA013	Unskilled labor for school rehabilitation.	In-service training for supervisors provided in Maths and Science, Language Arts, and Social Science to improve their pedago-gical support to teachers. Increase the number of supervisors.	Pre-service - course restructured to balance mastery of subject content and teaching methodology. In-service - course presented in a system of modules in core subjects (Maths, Portuguese, environmental science). Pedagogical methods including teaching of Portuguese as foreign language, multigrade teaching and classroom management.	Facilitating book production; books and reference materials for teacher training schools; training materials for bilingual schools.	Rehabilitate 334 classrooms in four regions.	n.a.	Local training of inspectorate staff.	National exam. in Grade 6. Review exam policies and national testing standards. Design new instrument to serve as tools for measuring achievement instead of simple measure for selection and promotion.

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	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
14	NIGERIA/ 3NIRPA132	Revolving Fund for Textbook Renewal (RFTR) to collect rental fees from parents for books.	Reorientation of the role of inspectors to that of advisor and trainers.	Train teachers in; (i) core curricula usage; (ii) local arts and crafts; (iii) continuous assessment and remediation; (iv) teaching of large classes and mixed ability groups; (v) teaching multigrade in small rural schools. To be supported by a mid-term credit condition; inte-gration of on-the-job in-service training into the prescribed work program of teachers, headmasters and supervisors.	Phased distribution of textbooks and other instructional materials, ex. 1992 Primary 1, 1993 Primary 2, 1994 Primary 3. Books distributed to LGEA and packed to facilitate easy collection.	n.a.	Increase proficiency of head-teachers in school and personnel management skills, better knowledge of record keeping and of professional issues.	Shared responsibility for school mgt. between Federal Govt, State Primary School Mgt. Board, and Local Govt Education Authorities. Development of training materials and execution of training shared between NPEC (Guidelines) NERD (materials development) and LGEA. LGEA provides routine instructional materials. SPMB organizes teacher training textbooks distribution and provides classroom supplies.	Assess academic achievement of primary school pupils with the view of establishing national norms and standards for primary education; in-service topics include continuous assessment.
15	CHAD/ 3CHDPA023	School rehabilitation by communities with support from 2 mobile units; financing of uncertified teachers.	Training of super-visory staff including the 7 principal inspectors, 34 elementary inspectors, the pedagogic advisors and staff of the regional training centers.	Training of 1750 un-certified supplementary teachers to the minimum level of certificate through two 10-day residential sessions, one 2-month session and 8 "journées pedagogiques"	600,000 textbooks and teachers' guides, materials for all classrooms, and basic materials (paper, books and pencils) for the elementary inspectors.	Financial assistance for rehabilitation and/ or construction and equipping of about 1000 primary classrooms.	One-month course for 600 school directors (30 per district), training focused on: school management teaching methods, student assessment and evaluation and teacher supervision.	Improvement of the operational guidelines of the school inspectorate and logistical support and equipment for regional offices.	n.a.

	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch. Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
16	NIGER/ 3NIGPA031	Creation of community-based school maintenance program through a manuals training, and provision of tool kits.	Construct and furnish 14 inspectorate offices; provide vehicles; training of the pedagogical staff of the inspectorate in administrative matters.	In-service training to upgrade 420 untrained but experienced teachers; refresher courses for 1800 semi-qualified/qualified teachers and 1200 primary school directors. Training to include multi-grade teaching double shift teaching.	Establish capability for the development of new textbooks and adapt existing ones. Add about 940,000 text-books and 66,000 teachers' guides to existing stock.	Construction of additional classrooms - 500 by "Travaux Communautaires" and 250 by the "Ateliers Scolaires." Rehabilitation of about 3000 classrooms; construction of offices, workshops, warehouses and lodgings for the inspectorate	Refresher courses for 1250 primary school directors. Courses would include multi-grade and double shift teaching	Strengthening regional inspectorate in; (i) resource control advice; (ii) teacher support and monitoring; (iii) supervision of construction/ rehabilitation and maintenance.	Computerization of the records of the directorate responsible for the administration of examinations.
17	BURKINA FASO/ 3BURPA043	Improvement of health status through: provision of micro-nutrients and deworming tablets vitamin A and iodine twice yearly and deworming tablets thrice yearly. Communities to rehabilitate and construct schools.	Training of 200 inspectors to improve school management and teacher support.	A three stage teacher training program consisting of: three week seminar, 12 months self-study, and a final three week seminar. Participants required to take the teacher certificate examination at course end. Pedagogical support, especially for the supplementary teachers during self-study year.	Provision of 1.4 million textbooks and 60,000 teachers guides.	Construct 1200 new classrooms and rehabilitate 300 existing; local financing of another 1200 classrooms.	Training of school directors in pedagogic management and preventive maintenance of textbooks and buildings.	Transportation and operating budget.	Support for the use of exercises, test and student assessment as tools for teaching rather than grading students. Introduction of standardized testing in Grade 3 as a diagnostic tool. Redesign the CEP to certify completion of primary school and selection to secondary school.
18	CAPE VERDE/ 3CAPPA004	n.a.	Development of new organizational structures and procedures for the MOE (supervision not fully articulated).	Pre-service - first two year program focus on core subjects and pedagogical training for 9th grade grads. One year program focused on pedagogical training for 11th grade grads. In-service - Pedagogical skill upgrading for 1200 teachers.	Production/distribution of 430,000 textbooks and 9,100 corresponding teachers' guides, establishment of textbooks revolving funds. Procurement/distribution of basic supplies (notebooks, pencils, ballpoint pens and erasers). Sales proceed deposited in supplies revolving fund to be established.	n.a.	n.a.	n.a.	Evaluation unit will design tests as measures of students achievements and as diagnostic tools taken into account difference between subjects and regions.

	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch.Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
19	MAURITANIA/ 3MTAPA038	Communities to construct and rehabilitate classrooms by providing local materials, masonry, labor, sanitary facilities and fencing.	Training of inspectors and pedagogical advisors in book usage, multigrade, and double shift teaching, timetabling, and school maintenance; provision of office facilities and transport to all 13 regional inspectorates.	In-service: two week training course for about 3000 teachers in book usage, multigrade and double shift teaching.	Printing of about 350,000 textbooks and 60,000 teacher guides.	Expansion of access by supporting communities to construct 250 classrooms and to renovate 50 classrooms.	n.a.	Strengthen the regional inspectorate to promote more efficient use of resources.	n.a.
20	MALI/ 3MALPA044	Participation in school construction/rehabilitation/maintenance through Parents Assn either by provision of in kind (labor and materials) or cash, promoted by donor-financed national matching fund.	Two weeks training for all 93 supervisors in their professional fields and on running in-service teacher training, annual seminars on decentralized management provision of a vehicle to all 31 inspectorates.	Pre-service: finance revision of teacher trng. program from 4 to 2 years with requisite curricula and entry level requirement adjustment. In-service: remedial instruction in basic discipline, new teaching methods, multigrade and double shift and resource management.	Print or reprint 1.1 million books from 11 newly developed titles and 4 existing ones and 40,000 teachers guides. Strengthening distribution system at central and regional levels. Provision of 7300 classroom kits.	Construction/rehabilitation and maintenance of classrooms and other educational facilities.	Training of school principals to improve relations with APEs, mgt of school budget and accounting, timetabling, preventive maintenance and safety.	At the central, strengthen DNEF; at the regional level provide DREs with training and technical means and at the local build up the Basic Education Inspectorate.	Establishment of a Pedag Control panel to assess st achievements. In PY1, a s sample of pupils in 2nd, 3 and 5th grades would be t Arabic/ French to determi initial skills levels. Test t repeated in every other ye follow progress.
21	GAMBIA/ 3GAMPA025	Provision of land, unskilled labor, local building materials and site security during construction.	n.a.	Pre-service: strengthened to increase output with focus on core subjects (English, Maths, Educ. Studies, combined Science and Social Studies), 20 weekend sessions. In-service: introduction of modular approach decentralized with other specialized personnel assisting Gambia College. Provision for upgrading 1200 unqualified teachers through residential and weekend courses and self-study..	Procurement/ distribution of textbooks and teacher guides, design development, production and distribution of instructional materials.	Rehabilitation of about 200 and construction of about 600 new classrooms to raise participation rate from 57% to 70%.	n.a.	n.a.	Strengthen and reorient th examination system by; (i Common Entrance Exam Primary School Leaving cate Exam; (ii) develop fo system to monitor student performance; establish co assessment scheme for Gr through in-service upgrad program for unqualified t

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	Country/ Project	Comm. Involvement in Health 1	System Support Supervision 2	Teacher Development 3	Textbooks and Materials 4	Facilities 5	Eff. Leadership (Sch.Head Trng) 6	Flexibility & Autonomy (Decentraliz.) 7	Assessment/ Exams 8
19	MAURITANIA/ IMLAPA038	Communities to construct and rehabilitate classrooms by providing local materials, masonry, labor, sanitary facilities and fencing	Training of inspectors and pedagogical advisors in book usage, multigrade, and double shift teaching, timetabling, and school maintenance, provision of office facilities and transport to all 13 regional inspectorates	In-service: two week training course for about 3000 teachers in book usage, multigrade and double shift teaching	Printing of about 350,000 textbooks and 60,000 teacher guides	Expansion of access by supporting communities to construct 250 classrooms and to renovate 50 classrooms	n.a	Strengthen the regional inspectorate to promote more efficient use of resources	n.a
20	MALI IMLIA0011	Participation in school construction/rehabilitation/maintenance through Parents Assn either by provision of in kind (labor and materials) or cash, promoted by donor-financed national matching fund	Two weeks training for all 93 supervisors in their professional fields and on running in-service teacher training, annual seminars on decentralized management, provision of a vehicle to all 31 inspectorates	Pre-service: finance revision of teacher trng. programs from 4- to 2 years with opposite curricula and entry level requirement adjustment. In-service: remedial instruction in basic disciplins; new teaching methods, multigrade and double shift and resource management	Print or reprint 1.1 million books from 11 newly developed titles and 4 existing ones and 40,000 teachers guides. Strengthening distribution system at central and regional levels. Provision of 7300 classroom kits	Construction/re-habilitation and maintenance of classrooms and other educational facilities	Training of school principals to improve relations with APEs, mgt of school budget and accounting, time-tabling, preventive maintenance and safety	At the central, strengthen DNET; at the regional level provide DRE's with training and technical means and at the local build up the Basic Education Inspectorate	Establishment of a Pedag Control panel to assess st achievements. In FY1, a s sample of pupils in 2nd, 3 and 5th grades would be t Arabic/ French to determi initial skills levels. Test t repeated in every other ye follow progress
21	GAMBIA/ IGAMPA025	Provision of land, unskilled labor, local building materials and site security during construction	n.a	Pre-service: strengthened to increase output with focus on core subjects (English, Maths, Educ. Studies, combined Science and Social Studies), 20 weekend sessions. In-service: introduction of modular approach decentralized with other specialized personnel assisting Gambia College. Provision for upgrading 1200 unqualified teachers through residential and weekend courses and self-study.	Procurement/ distribution of text-books and teacher guides, design development, production and distribution of instructional materials	Rehabilitation of about 200 and construction of about 600 new classrooms to raise participation rate from 57% to 70%	n.a	n.a	Strengthen and reorient th examination system by; (i Common Entrance Exam Primary School Leaving cate Exam; (ii) develop fe system to monitor student performance, establish co assessment scheme for Gr through in-service upgrad program for unqualified t

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ANNEX 3. FACTORS THAT DETERMINE SCHOOL EFFECTIVENESS

Table A3.1.1: Supporting Inputs: Parent and Community Support

Parent and Community Support	
Definition: Parent and Community Support is effective when: 1. The child comes to school healthy and prepared to learn. 2. Parents and the community provide financial and/or material support for the school's operation. 3. There is frequent communication between school staff and parents. 4. Community members and parents assist with instruction. 5. The community has a role, with meaningful authority, in school governance.	
Requirements	*Indicators*
1. Health and learning preparedness	a. Protein-energy malnutrition, hunger, and micro-nutrient deficiencies are not problematic among school children. b. illness, parasite loads and hearing and vision impairments are not problematic among school children. c. The quality of the program and the numbers of children involved in local formal pre-school programs are high. d. There is evidence of reading, conversations, and directed play in the home.
2. Financial and/or material support	a. Significant monetary or in-kind contributions (e.g. building materials, land, food for teachers) beyond fees prescribed by government are evident. b. Significant labor for site preparation, building construction, and building materials is evident.
3. Frequent communication between school staff and parents	a. School-public events and parent-teacher conferences are frequent and of high quality. b. Communications to parents by the school staff are frequent and meaningful. c. Positive parent-initiated contacts with school staff are frequent.
4. Assistance with instruction by community members and parents	a. Parents and the community frequently serve as tutors, information resources and/or an audience for student academic work. b. Parents support the idea of homework and monitor it.
5. Community role in school governance	a. The role, functions, and authority of the local oversight committee/board are clear and agreed-upon. b. The committee/board meet frequently and make meaningful decisions.

Table A3.1.2: Supporting Inputs: Effective Support from the Education System

Effective Support from the Education System	
Definition: Support to individual schools by the education system is effective when: 1. The system delegates authority and responsibility for improvement to the schools themselves. 2. The system communicates expectations (exerts pressure) for successful academic results. 3. The system provides services to the schools that help them succeed. 4. The system monitors and evaluates schools' academic performances and their improvement efforts.	
Requirements	*Indicators*
1. Delegation of authority and responsibility	a. The system has a clearly defined policy that delegates to the school the authority for deciding school schedules, needed equipment and materials, schemes of work, and preferred teaching methods.
2. Communication of expectations	a. The system has set performance standards in terms of student competencies. b. The system has defined the criteria that determine a school's effectiveness. c. Educational leaders above the school level communicate frequently and publicly a goal of excellence for the school.
3. Provision of services	a. School supervisors inform school staff of promising instructional practices and assist staff in trying them out. b. The system provides continuing advice and training for school managers and teachers. c. The system provides the resources needed to achieve instructional goals. d. The system protects the school from political turbulence.
4. Monitoring and evaluation	a. School heads are evaluated regularly, focussing on their role as instructional managers. b. The system assesses each school's academic performance and its change efforts and both recognizes successes and provides support to overcome weaknesses.

Table A3.1.3: Supporting Inputs: Adequate Material Support

Adequate Material Support	
Definition: Material support for a school is adequate for effectiveness when: 1. Textbooks and other reading materials in an appropriate language with relevant contents are available in sufficient quantity for all children to use them. 2. Teachers have guides that outline what to teach and how to teach it and that provide diagnostic and evaluation materials to use with students. 3. Students have sufficient paper and implements to adequately practice what is taught. 4. The school has enough classrooms to accommodate classes of teachable size. 5. Classrooms are equipped with blackboards and chalk, enough desks to seat all the children, and visual aids that support instruction.	
Requirements	*Indicators*
1. Textbooks and other reading material	a. All children can identify their textbook (even if shared) and accurately describe its contents. b. All children can name other reading material, know where to find this and can name the last thing they read.
2. Teacher guides	a. All teachers can show someone the Teachers' Guide that they use and explain how they use it. b. The Teachers' Guide contains material on subject matter, how to teach it, and means of evaluation.
3. Paper and writing implements	a. Children have with them a notebook (or notebook sections) for each subject and an effective writing implement.
4. Classrooms	a. All classrooms accommodate comfortably class sizes at the government norms, and there are enough classrooms to accommodate all enrolled students for these class sizes.
5. Classroom equipment	a. There is a usable blackboard and sufficient chalk. b. There are enough desk places so that all students enrolled in the class have a place.

Table A3.2.1: Enabling Conditions: Effective Leadership

Effective Leadership	
Definition: Effective leadership exits in a school when: 1. The Head sees that the resources are available to provide adequate support to teachers, sufficient learning materials, and an adequate and well-maintained learning facility. 2. The Head actively pursues high instructional standards by: a. clearly and frequently stating in concrete terms the school's mission, curricular goals and expected teaching behaviors. b. clearly and frequently expressing high expectations of pupils and the school's focus on learning as its central purpose. c. coordinating and managing the learning process. 3. The Head communicates regularly and effectively with teachers, with parents and others in the community. 4. The Head maintains high visibility and accessibility to pupils, teachers, parents and others in the community.	
Requirements	*Indicators*
1. Necessary resources are available	a. Teachers have adequate compensation in whatever form, to concentrate on teaching. b. Teachers and pupils have adequate materials (textbooks, paper, pencils, chalk, supplementary materials and equipment) to be able to vary teaching methods. c. Class size and classrooms correspond to government mandated norms. d. School buildings and grounds are maintained attractively and water is available.
2. High instructional standards are pursued	a. The Head's conversations and presentations regularly refer to confidence in student abilities and to learning. b. The Head can describe the school's curricular goals and the classroom behaviors that he/she believes constitute good teaching. c. There are minimal disruptions to learning time (e.g. administrative assemblies, long recesses, and teacher tardiness to class and absenteeism). d. The Head and Deputy Head/s frequently visit classrooms and hold development conferences with teachers. e. The Head frequently reviews pupil performance (by level, and by subject). f. The Head frequently reviews teachers, and their curriculum programs.
3. Regular and effective communication with teachers, parents and the community	a. Staff meetings are frequent and productive. b. Communication with teachers is frequent and constructive. c. School public events are frequent and productive. d. The Head's involvement in community activities outside the school is frequent and constructive.
4. High visibility and accessibility	a. The Head's involvement in community activities outside the school is frequent and constructive. b. The Head's interaction with individual pupils and school assemblies is frequent and constructive. c. The Head is informally available in the school outside his/her office. d. Parent-initiated contact with the Head is frequent and constructive.

Table A3.2.2: Enabling Conditions: A Capable Teaching Force

A Capable Teaching Force	
Definition: The teachers in a school are considered capable when: 1. They have mastery of the material they are teaching (knowledge). 2. They have taught for a few years (experience). 3. The majority of them have taught together in the school for some time (stability). 4. The majority of them are full-time teachers (full-time). Full-time teachers are those who spend every school day working a complete teaching load.	
Requirements	*Indicators*
1. Knowledge	a. All teachers have at least completed secondary school. b. All teachers can demonstrate subject mastery on the material they teach, (e.g. they would receive a high score on a test based on the material they teach).
2. Experience	a. The majority of teachers have taught for more than one year.
3. Stability	a. There is a low teacher turnover rate from year to year.
4. Full-time	a. Most of the teachers are present at the school for the full school day and teach most of that time.

Table A3.2.3: Enabling Conditions: Flexibility and Autonomy

Flexibility and Autonomy	
Definition: A school has sufficient flexibility and autonomy to be effective when: 1. The staff in the school can determine the specifics of how school time and resources are used to increase academic performance. 2. The school is able to draw on various constituencies for resources.	
Requirements	*Indicators*
1. Cooperative decision-making by the Head and teachers for specific school processes.	a. The School Head and teachers can identify decisions they have made regarding timetabling, how textbooks and other materials are used, student assessment techniques, and other school processes (teacher development, extra-curricular activities, etc.)
2. Independence to acquire and distribute resources according to the school's decisions.	a. The School Head is able to demonstrate that the inputs which are acquired from the government, the community, and the parents are allocated according to the school's assessment of its educational needs.

Table A3.2.4: Enabling Conditions: High Time-In-School

High Time-In-School	
Definition: Educational effectiveness is made more possible when students spend more days per year in school and are actively engaged in longer daily school hours.	
Requirements	*Indicators*
1. The established number of days and hours per day are high.	a. The number of days in the school year and the hours per day are high and equivalent to those of other productive educational systems.
2. The school is in session and operating for the established number of days and hours per day.	a. The school is in session and operating for the established number of days and hours per day.

Table A3.3.1: School Climate: High Expectations of Students

High Expectations of Students	
Definition: High expectations of students exist in a school when: 1. There is a clear schoolwide set of academic and social behavior goals which are continuously monitored. 2. The School Head and teachers communicate to students and their parents that they expect the students to work hard and to excel academically. 3. There are many opportunities for students to take responsibility. 4. Past student achievement levels confirm that they achieve high standards of performance.	
Requirements	*Indicators*
1. Clear academic and social behavior goals	a. The Head and teachers can describe the goals to others and do so frequently to students and parents. b. The Head and teachers regularly monitor progress of students towards these goals.
2. Communication of expectations	a. Assignments given to students are in sufficient amount and at an appropriate level of difficulty to consolidate and extend student capabilities. b. Teachers' expressions of confidence in students' abilities are frequent and appropriate.
3. Opportunities for student responsibility	a. Responsibilities are frequently given to students for school activities, discipline, room and board (at boarding schools), tutoring, and fund-raising. b. Students perform well in the responsibilities delegated to them.
4. Past achievement levels	a. The school's recent historical academic record favorably compares to the national averages.

Table A3.3.2: School Climate: Positive Teacher Attitudes

Positive Teacher Attitudes	
Definition: Positive teacher attitudes exist when: 1. **Teachers have confidence in their ability to teach.** 2. **Teachers are committed to teaching and care about their students.** 3. **Teachers cooperate in efforts to improve the school and to help each other with instructional problems.**	
Requirements	*Indicators*
1. Confidence	a. Teachers exhibit and report their own sense of being able to teach successfully. b. Teachers are at ease with learning materials and teaching ideas and integrate them into their teaching.
2. Commitment and caring	a. Most students report that teachers are committed to teaching and care about them (the students) personally. b. Teachers set high standards of work and behavior and model these themselves. c. Teachers, administrators and parents report that the school is a caring place. d. There is low teacher absenteeism and tardiness.
3. Cooperation	a. Teachers plan school activities and their teaching collaboratively. b. Teachers share ideas with each other. c. Teachers and administrators work together on whole-school issues.

Table A3.3.3: School Climate: Order and Discipline

Order and Discipline	
Definition: Order and discipline are evident in an effective school when: 1. **Classrooms and classes are well-organized.** 2. **School rules and regulations are clearly articulated, are agreed upon by both teachers and students, and are equitably maintained.**	
Requirements	***Indicator***
1. **Well-organized classrooms and classes**	a. **Seating arrangements are uncongested.** b. **External noise levels and lighting are conducive to learning.** c. **Classroom routines are smooth and efficient:** **(i) classes start quickly and purposefully;** **(ii) class rules and procedures are clear and are followed;** **(iii) assignments, materials and supplies are ready before class;** **(iv) consistent, equitable discipline is applied quickly and without disruption for all students;** **(v) positive behavior is reinforced; and** **(vi) teachers handle almost all disciplinary problems.**
2. **School rules and regulations**	a. **A written code of conduct exists and is known by students and staff.** b. **Discipline procedures are routine, quick and focus on the student's behavior.** c. **Students and teachers attend classes regularly and according to an established timetable.** d. **There is almost no evidence of inappropriate behavior and school facilities are clean and not defaced.**

Table 3.3.4: School Climate: Organized Curriculum

Organized Curriculum	
Definition: A curriculum is well-organized when: 1. The school emphasizes the acquisition of basic skills. 2. The school defines learning objectives that are matched to identified teaching strategies, available materials, and an integrated sequence of topics across the grade levels. 3. The available learning resources allow teachers to adapt the curriculum to their students' needs and to produce local teaching-learning materials.	
Requirements	*Indicators*
1. Acquisition of basic skills	a. Teachers can identify basic skills in each subject and demonstrate how they ensure mastery of these skills by students. b. Students perform well on tests that major on basic skills, especially numeracy and literacy.
2. Systematic scheme of work	a. The school has a comprehensive written scheme of work that identifies learning objectives, and realistically-available materials, and all teachers can explain what they teach in terms of this scheme.
3. Learning resources	a. Materials, both provided and locally-prepared, identified in the scheme of work are available and used by teachers. b. Teachers prepare their own classroom materials (e.g. exercises, projects, quizzes on a regular basis).

Table A3.3.5 School Climate: Rewards and Incentives

Rewards and Incentives	
Definition: A school is using rewards and incentives when there is clearly-defined, public recognition for academic success in the school.	
Requirements	*Indicators*
1. Clear academic standards	a. Standards that define academic success are clear and known by all teachers and students.
2. Academic success is recognized	a. The school regularly uses symbols, ceremonies, and awards to officially recognize academic success.

Table A3.4.1: Teaching/Learning Process: High Learning Time

High Learning Time	
Definition: A school has high learning time* when: 1. The amount of school time used for learning is maximized. 2. Classroom learning time is used efficiently. * the amount of time a student spends on a learning activity during which he or she is achieving a high rate of success.	
Requirements	*Indicators*
1. Maximized school learning time	a. School events are scheduled to avoid disrupting learning time. b. Time-use allocation for subjects is clearly established and followed by teachers. c. School day and individual classes start and end on time. d. Extra learning time is provided for students who want or need it. e. There are firm and enforced policies regarding tardiness, absenteeism, and appropriate classroom behavior for both teachers and students. f. Students are achieving tasks assigned at a high rate of success.
2. Efficient use of classroom learning time	a. Non-instructional classroom time is minimal. b. Teachers maintain a brisk pace for instruction with clear stop and start clues, and quick introductions of topics. c. Teachers are aware of whole-class needs in pacing lessons, providing assistance to individuals, setting and supervising seatwork, and encouraging out-of-class work for those who need it. d. Teachers correct and return students' assignments and tests quickly.

Table A3.4.2: Teaching/Learning Process: Variety in Teaching Strategies

Variety in Teaching Strategies	
Definition: In effective schools, the teachers employ alternative teaching strategies to better accommodate student differences and the nature of the material being taught.	
Requirements	*Indicators*
1. Active engagement of students by the use of a variety of teaching techniques	a. Teachers use a variety of teaching techniques including individual assignments with worksheets, class discussion, group work, explaining, drill-and-practice, asking questions, and cross-age tutoring. b. When available, teachers make regular use of interactive radio and/or programmed materials. c. Students are actively engaged in the classroom activities.

Table A3.4.3: Teaching/Learning Process: Frequent Homework

Frequent Homework	
Definition: Homework is being used effectively when it is given more than once a week to Grades Four and above, completed by all the students, and checked and commented on to individual students by the teachers.	
Requirements	*Indicators*
1. Homework is assigned, completed and feedback provided.	a. Homework is assigned and done by students. Content and frequency of homework is appropriate to the age and home environment of the children. b. Teachers check and provide feedback to students on all homework that is done.

Table A3.4.4: Teaching/Learning Process: Frequent Student Assessment and Feedback

Frequent Student Assessment and Feedback	
Definition: Student assessment and feedback are effective when: 1. They occur regularly and in an integrated way at the classroom, school, and system levels. 2. The central purpose is to provide diagnostic feedback to students, teachers, and managers. 3. Feedback to students is immediate at the classroom level and continuous over time.	
Requirements	*Indicators*
1. Regular and integrated assessment and feedback.	a. The school and system have a clear schedule of performance, monitoring activities that check academic progress. b. Assessment of student performance at all levels match the learning objectives for the students being assessed. c. The school maintains records of individual students' performances using simple routines for collecting, storing, and reporting this information.
2. Assessment used for diagnostic purposes	a. Teachers and administrators use test results, grade reports, and attendance records to spot and respond to potential problems. b. This information is also used in period reviews of the school's curricular scheme of work.
3. Feedback is immediate and continuous	a. Teachers monitor student progress frequently through tests and quizzes, formal and informal interaction, and written and oral responses. b. Teachers provide immediate feedback on students' in-class responses and written work, mixing praise and constructive criticism equally.

Table A3.5.1: Student Outcomes: Participation

Participation	
Definition: A school is effective when student participation is high in terms of: 1. Attendance, 2. Continuation, and 3. Completion.	
Requirements	*Indicators*
1. Attendance	a. Daily attendance is high in all grades for both sexes throughout the school year.
2. Continuation	a. The number of repeating students in each grade level is low. b. The number of drop-outs from each class during the school year and between grades is low. c. The number of students continuing on to secondary school after successfully completing the highest grade is high.
3. Completion	a. The percentage of grade one entrants who successfully complete all grades is high.

Table A3.5.2: Student Outcomes: Academic Achievement

Academic Achievement	
Definition: A school is effective when a high percentage of the students who leave the school demonstrate: 1. An ability to read and write, 2. A facility with arithmetic, and 3. Skills in solving problems.	
Requirements	*Indicators*
1. Literacy	a. Most students perform well on standardized tests that measure the skills in literacy appropriate to their grade level
2. Numeracy	a. Most students perform well on standardized tests that measure the skills in arithmetic appropriate to their grade level.
3. Problem-solving skills	a. On standardized tests, most students demonstrate in higher-order thinking that are appropriate to their ages (e.g. Bloom's skills in comprehension, application, analysis, synthesis and evaluation).

Table A3.3: Student Outcomes: Social Skills

Social Skills	
Definition: A school is effective when the children who leave the school: 1. Express rational, empirical and egalitarian beliefs about how to function in society ("attitudinal modernity"), 2. Demonstrate that they know how to interact effectively with peers and adults. 3. Eventually become involved productively in the social and political life of their community and nation.	
Requirements	*Indicators*
1. Attitudinal modernity	a. The older students can express their beliefs intelligibly to adults. b. The older students score highly on tests based on their culture that measure modern attitudes.
2. Interpersonal effectiveness	a. The students demonstrate effective interpersonal skills with each other and with adults at school and outside the school.
3. Community involvement	a. Most of the school's alumni are involved in volunteer development activities. b. Most of the school's alumni participate in "democratic processes," including elections.

Table A5.4: Student Outcomes: Economic Success

Economic Success	
Definition: **A school is effective when those who have completed its course of study:** **1. Tend to earn more after leaving school than other people in the same age cohort, and** **2. Show higher productivity in their work than others in their age cohort.**	
Requirements	***Indicators***
1. Earnings	a. Income levels of graduates from the school are higher than (i) those of people of similar ages in the community who did not complete the school, and (ii) the national median income level for primary school graduates.
2. Productivity	a. The physical output of graduates from the school for a given amount of labor is higher than the estimated average output for people with a full primary education.

Definitions of Student Outcome Factors

5.1 ***Participation***

A school is effective when student participation is high in terms of daily attendance, annual promotion, the percentage of entrants who graduate from primary school, and continuation to secondary school.

5.2 ***Academic Achievement***

A school is effective when a high percentage of the students who leave the school demonstrate an ability to read and write, a facility with arithmetic, and skills in solving problems.

5.3 ***Social Skills***

A school is effective when the children who leave the school express rational, empirical and egalitarian beliefs about how to function in society; demonstrate that they know how to interact effectively with peers and adults; and eventually become involved productively in the social and political life of their community and nation.

5.4 ***Economic Success***

A school is effective when those who have completed its course of study show higher productivity in their work and consequently earn more than others in the same age cohort with similar background and academic achievement.

ANNEX 4. Examples of Learning Outcomes and Factors Affecting Them

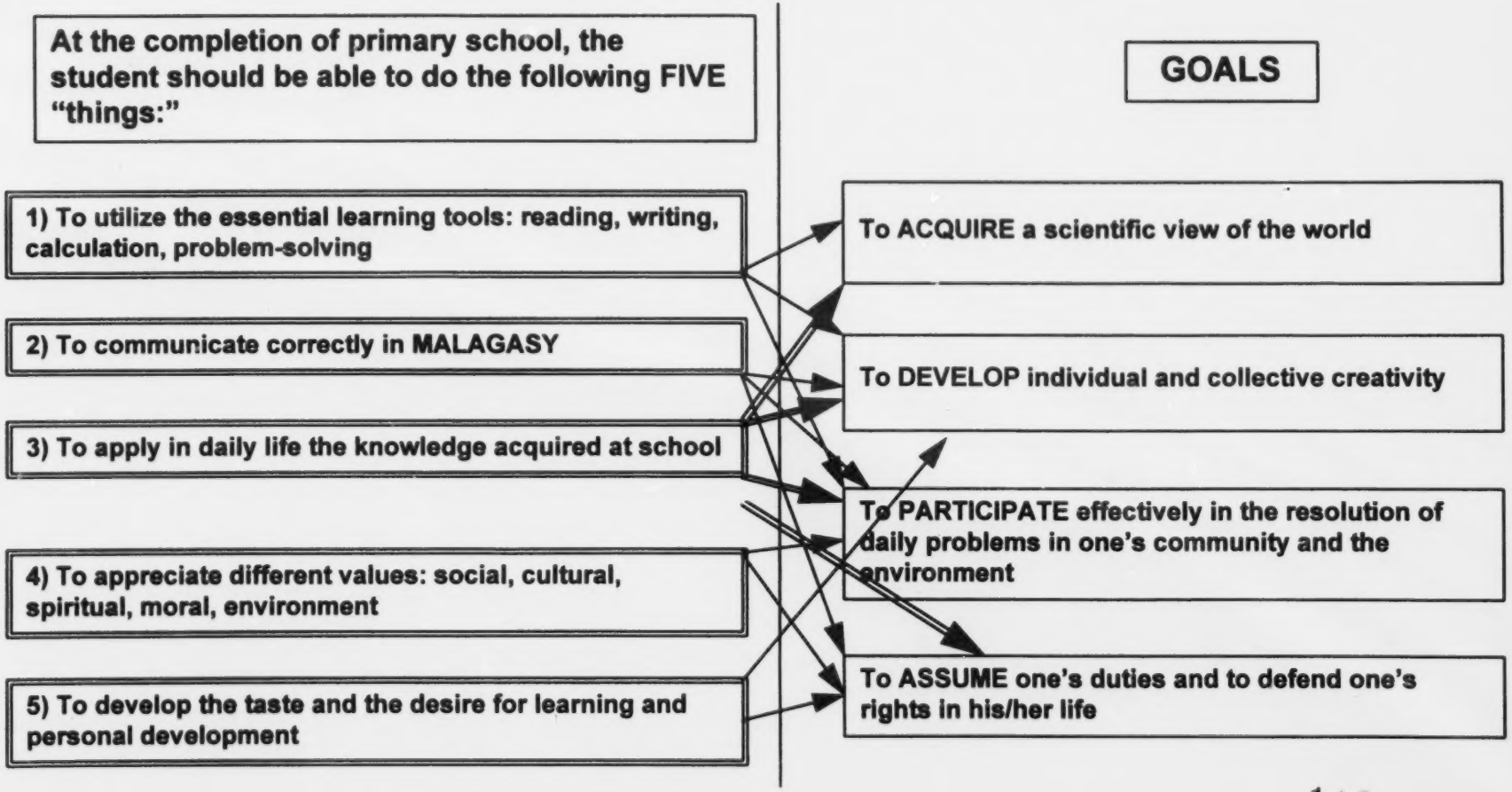
A. Madagascar

B. Senegal

C. Swaziland

MADAGASCAR
1. GOALS AND OBJECTIVES

Summary of Student's Exit Profile from Grades 5 (T5)


At the completion of primary school, the student should be able to do the following FIVE "things:"
GOALS
1) To utilize the essential learning tools: reading, writing, calculation, problem-solving
2) To communicate correctly in MALAGASY
3) To apply in daily life the knowledge acquired at school
4) To appreciate different values: social, cultural, spiritual, moral, environment
5) To develop the taste and the desire for learning and personal development
To ACQUIRE a scientific view of the world
To DEVELOP individual and collective creativity
To PARTICIPATE effectively in the resolution of daily problems in one's community and the environment
To ASSUME one's duties and to defend one's rights in his/her life

2. KEY FACTORS

Juillet 1993

Liste des facteurs prioritaires déterminants l'efficacité de l'école malgache

(Inputs)

1. Soutien de la communauté

   1.1 Cadre scolaire fonctionnel et attrayant

   1.2 Equipement suffisant et adéquat

   1.3 Aide financière et/ou matérielle

   1.4 Echanges fréquents:
   Ecole — Parents
   Ecole — Communauté

   1.5 Santé de l'enfant suivie

   1.6 Alimentation en eau potable

(Boite noire)

2. Matériels didactiques

   2.1 Un manuel pour deux élèves dans les disciplines fondamentales

   2.2 Un guide du maître, par matière

   2.3 Effets scolaires individuels suffisants

   2.4 Matérials didactiques collectifs suffisants

3. Leadership effectif

   3.1 Professionalisation de la fonction du Directeur

   3.2 Directeur d'école déchargé

   3.3 Formation du Directeur avec suivi et évaluation

4. Corps enseignant compétent

   4.1 Auto-formation assisté par le Directeur

   4.2 Encadrement pédagogique permanent assuré par le Directeur

   4.3 Remise à niveau des connaissances générales

2. KEY FACTORS (cont'd)

Juillet 1993

5. Espérance de haute performance des élèves

- 5.1 Fixer des buts scolaires et sociaux clairs
- 5.2 Communiquer ces buts aux élèves et aux parents
- 5.3 Valorisation de l'effort de l'élève
- 5.4 Responsabilisation de l'élève

6. Attitude positive des enseignants

- 6.1 Confiance dans l'aptitude à enseigner
- 6.2 Coopération entre enseignants
- 6.3 Dévouement et attention
- 6.4 L'enseignement répond aux attentes de la communauté

7. Activités d'apprentissage efficaces

- 7.1 Optimisation du temps consacré aux études
- 7.2 Diversité des méthodes d'enseignement
- 7.3 Evaluation fréquentes des élèves (+ diagnostic)
- 7.4 Devoirs fréquents

8. Conditions optimales de travail

- 8.1 Un maître par classe
- 8.2 Une classe par section
- 8.3 Stabilité du poste
- 8.4 Ordre et discipline
- 8.5 Effectif élèves par classe

2. KEY FACTORS (cont'd)

Juillet 1993

(Résultats)

9. Participation

- 9.1 Assiduité quotidienne
- 9.2 Passage en classe supérieure
- 9.3 Pourcentage élevé des élèves de 11ème qui ont obtenu leur CEPE en 7ème
- 9.4 Pourcentage élevé des élèves qui passent en classe supérieure

10. Résultats académiques

- 10.1 Pourcentage des élèves qui savent lire et écrire
- 10.2 Pourcentage des élèves qui sont à l'aise en arithmétique
- 10.3 Pourcentage des élèves qui sont à l'aise pour résoudre un problème de mathématiques

11. Compétence sociale

- 11.1 Exprimer des convictions rationnelles empiriques et égalitaires
- 11.2 Savoir communiquer avec les autres
- 11.3 Participer à la vie socio-politique

12. Succès économique

- 12.1 Productivité supérieure au travail
- 12.2 Revenu supérieur par rapport à celui d'un autre de même niveau d'éducation

Concept 1. ELEMENTS DE SOUTIEN

Facteur 1.2 Equipement et matériel suffisant et adéquat

Définition : 1. Les salles sont équipés de tableaux (et de craie), d'un nombre suffisant de table-bancs et de moyens visuels.
2. L'école dispose de matériels adéquats et suffisants pour les travaux de production à titre éducatif et les travaux d'entretien.

Besoins	Indicateurs
1. Equipement adéquat et suffisant.	a. Il y a deux sortes de tableau assez large dans chaque salle de classe: fixe et mobile, et suffisamment de craie. b. Il y a une place assise pour chaque élève dans chaque classe. c. Il y a un bureau du maître pourvu d'une chaise et une estrade. d. Il y a un meuble de rangement fermé à clé dans chaque classe.
2. Matériels pour les travaux de production à titre éducatif	a. Il y a assez de matériels utilisables par les élèves pour les travaux d'entretien et de production à l'école.

Concept 3. LEADERSHIP EFFECTIF

Facteur 3 .1 Compétence dans la fonction

Définition : Il existe à l'école un leadership effectif lorsque le chef d'établissement est compétent dans l'enseignement:

1. a déjà fait ses preuves.

2. exerce cette fonction pour un certain nombre d'années.

3. a reçu une formation spécialisée.

Besoins	Indicateurs
Expériences dans l'enseignement.	a. Le chef d'établissement a déjà enseigné plus de CINQ ans avant d'exercer cette fonction. b. Sur l'initiative du chef d'établissement, des activités concrètes ont été entreprises : - l'amélioration sensible de l'environnement scolaire - la création d'activités péri et parascolaires - amélioration sensible des résultats scolaires.
Rotation du Directeur.	a La rotation du chef d'établissement se fait tous les CINQ ans au moins .
Stage de formation avec suivi et évaluation.	b Le chef d'établissement a bénéficié d'au moins DEUX stages de formation avec suivi et évaluation.

Concept 3. LEADERSHIP EFFECTIF

Facteur 3 .2 Ressources humaines nécessaires et suffisantes

Définition :

Il existe à l'école un leadership effectif lorsque le chef d'établissement veille à avoir des ressources humaine suffisantes.et en assure une bonne gestion.

Besoins	Indicateurs
Disposition en ressources humaines suffisantes.	a. Les enseignants sont : en nombre suffisant en qualité et en quantité.
2. Bonne gestion du personnel.	La repartition se fait en fonction de l'expérience de chaque enseignant.

Concept 3. LEADERSHIP EFFECTIF

Facteur 3 . 3 Supervision effective des activites pedagogiques

Définition :

Il existe à l'école un leadership effectif lorsque le chef d'établissement procède à des supervisions des activités pédagogiques auprès des enseignants et des élèves.

Besoins	Indicateurs
Actions positives du chef d'établissement au sein de l'école.	a. Le chef d'établissement se rend à chaque fois disponibles. b. Il s'intéresse à son école : -. Le chef d'établissement veille à ce que les études soient petubées le moins possible (réunionsadministratives, manque de ponctualité et absentéisme) - Le chef d'établissement organise en début d'année scolaire une réunion d'information auprès des enseseignants et des élèves sur : - Le chef d'établissement préside et anime la réunion du Consil des maîtres. -c. Le chef d'établissement établit le calendrier des examens, visite les classes fréquemment,contrôle fréquemment le travail des maîtres, examine et évalue les résultats scolaires des élèves, veille au prestige de l'école.

SENEGAL

Objectifs Relatifs à l'Accès et à l'Efficacite

1. Amener le taux de scolarisation à 65%.
2. Augmenter le taux de scolisation des filles.
3. reduire le taux d'abandon.
4. réduire le taux de redoublement.
5. amener 80% des insecrits à terminer le cycle élémentaire.

Les Objectifs de la Qualité

A fin du cycle élémentaire l'enfant est capable de:

1. d'observer et d'analyser (faire preuve d'espirit de synthèse et d'esprit critique.
2. Sènraciner dans ses valeurs culturelles.
3. Maitriser les éléments de base de la pensée logique et mathématique.
4. Maitriser les instruments d'expression et de communication
5. Utiliser les techniques élémentaires de production.
6. Faire preuve de créativité artistique.
7. Pratiquer en groupe des activités sportives selon ses aptitudes physiques.
8. Faire preuve de civisme et de patriotisme en vue de s'integrer harmonieusement dan la société.

Liste des Facteurs - clé

1. Leadership du Directeur
2. Encadrement des enseignants
3. Enseignants competent
4. Attitude positive des enseignants
5. Temps de travail suffisant
6. Bon climat de l'école
7. Materiel didactique suffisant
8. Cycle complet
9. Formation professionelle initiale des enseignants
10. Programme bien structuré et adapté
11. Infrastructures et équipments
12. Devoirs fréquents
13. Participation des éléves
14. Soutien de la communauté
15. Participationi de la communauté (comme resource d'apprentissage)

Facteur clé 1 : Leadership du Directeur

Définition : Le leadership du Directeur d'une école efficace est effectif lorsque :

1. le chef d'établissement prend des initiatives en vue de trouver des ressources nécessaires pour soutenir adéquatement les enseignants dans le travail de classe ;

2. le chef d'établissement veille au travail des enseignants, des élèves et à l'organisation des dispositions matérielles ;

3. il entretient avec les enseignants, les parents d'élèves et la communauté de bonnes relations ;

Besoins	Indicateurs
1. Ressources disponibles	a - les enseignants et les élèves disposent du matériel nécessaire pour les activités scolaires
2. Gestion administrative et pédagogique	a - le directeur vise les préparations des enseignants b - le directeur veille à la tenue des documents détenus par les maîtres (différents registres, tableau d'affichage, modules, préparations, cahiers de fournitures, de devoirs, etc....) c - le directeur veille à l'assiduité, à la ponctualité du personnel et des élèves d - il fait lire le courrier officiel et transmet celui du personnel e - le directeur déchargé assure des visites de classe. f - il contrôle les résultats des élèves (visa des cahiers) g - il veille au respect des programmes officiels h - il tient des réunions pédagogiques avec ses adjoints
3. Rôle social	a - il initie une association d'entraide au niveau de l'école b - il veille à la situation administrative du personnel enseignant c - Le directeur s'occupe du comité de gestion du FDS ou d'autres comités et détient les procès verbaux d - il participe aux activités de la Communauté

Facteur clé 4 : Attitudes positives des enseignants

Définition : Dans une école efficace, les attitudes des enseignants sont positives lorsqu':

1 - ils ont confiance dans leur aptitude à enseigner

2 - ils acceptent de travailler en équipe et s'entraident en cas de problèmes pédagogiques

3 - ils font montre d'un dévouement au travail reconnu par les élèves

Besoins	Indicateurs
1. Confiance	a - L'enseignant exprime son aptitude à enseigner dans tous les cours b - le maître laisse ses élèves s'exprimer librement dans l'ordre et la discipline c - les enseignants utilisent le matériel didactique et les concepts sans difficulté
2. Constitution d'équipe pédagogique à l'école	a - Les enseignants travaillent en équipe au sein de l'école b - Ils s'entraident pour résoudre leurs problèmes pédagogiques
3. Dévouement et attention	a - Les enseignants sont ponctuels et leurs absences toujours justifiées b - La plupart des élèves reconnaissent que les enseignants se dévouent à leur apprendre quelque chose et s'occupent régulièrement de chacun d'eux c - les enseignants peuvent prodiguer les premiers soins aux élèves blessés d - l'enseignant ne prétexte pas de difficultés financières pour s'absenter

Facteur clé 6 : Bon climat de l'école

Définition : Dans une école efficace, le climat est propice lorsqu'il y a :

1. un environnement favorable au travail
2. un cadre accueillant pour les élèves et le personnel
3. une bonne organisation de la vie scolaire
4. une sécurité effective

Besoins	Indicateurs
1. Bonne organisation de l'école et des salles	a - Le niveau des bruits extérieurs ne perturbe pas les études b - Les salles de classe sont aérées et bien éclairées c - Le matériel didactique est toujours prêt avant les cours d -Les cours se déroulent sans digression
2. Cadre accueillant	a - Les installations sanitaires sont conformes à la sexité des élèves et du personnel b - Les installations sanitaires sont propres et en bon état c - L'école est clôturée (mur, haie vive, autres ...) d - La cour de l'école est spacieuse et bien ombragée
3. Organisation de la vie scolaire	a - L'école dispose d'un règlement intérieur clair, compris et respecté par les élèves et le personnel b - Les punitions ou récompenses sont rapides et centrées sur le comportement de l'élève c - Les visites des parents d'élèves sont réglementées
4. Sécurité efficace	a - L'école dispose d'un gardien - planton b - La sécurité de l'école et des installations est effectivement assurée

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Facteur clé 11 : Infrastructures et Equipements

Définition : Les infrastructures et les équipements d'une école efficace se composent de salles de classe : bureau du Directeur - mobilier - bloc sanitaire - terrain de sport - installations sportives - boîte à pharmacie - magasin - salle des maîtres - cantine scolaire - logements du Directeur et du gardien - eau - téléphone - électricité - salles spécialisées

Besoins	Indicateurs
1. Salles de classes	a - Une salle de classe par cours
2. Mobilier	a - une table - une chaise - une armoire pour le maître b - un tableau noir - un tableau à chevalet c - les tables-bancs sont adaptées à la taille des élèves le nombre d'élèves par table-banc est correct
3. Bloc sanitaire	a - existence d'un bloc sanitaire fonctionnel b - pour les filles - pour les garçons - pour le personnel
4. Eau - électricité - téléphone	a - un point d'eau potable dans l'enceinte de l'école b - une installation téléphonique si possible c - une installation électrique si possible
5. Terrain et installations sportives	a - un terrain de sports b - des installations sportives suffisantes et adaptées
6. Bureau	a - un bureau réservé au directeur b - emplacement du bureau dans l'enceinte de l'école
7. Boîte à pharmacie	a - une boîte à pharmacie pour l'école b - des médicaments pour les premiers soins c - accessible au personnel
8. Magasin	a - un magasin qui se ferme réservé au matériel de l'école
9. Salles des maîtres	a - une salle des maîtres pour les récréations b - une chaise pour chaque maître
10. Cantine scolaire	a - la cantine scolaire dispose de vivres b - la cantine dispose de matériel de cuisine c - une salle de réfectoire fonctionnelle d - les élèves y prennent leurs repas
11. Logement du Directeur	a - un logement du directeur dans l'enceinte de l'école
12. Logement du gardien	a - un logement du gardien dans l'enceinte de l'école
13. Salles spécialisées	a - des salles spécialisées. b - dotées d'instruments de travail pour les différentes activités

Facteur clé 12 : Devoirs fréquents

Définition : Dans une école efficace, les devoirs en classe et à domicile sont fréquents lorsque l'on donne tous le jours à l'élève des exercices qui développent

1. la compréhension
2. l'application de notions acquises et/ou leur révision
3. le réinvestissement de ces notions

Besoins	Indicateurs
1. Devoirs à domicile	a - L'élève est capable d'effectuer à domicile et de rendre dans les délais fixés par le maître, des exercices de consolidation sur la leçon du jour b - Le maître corrige régulièrement les devoirs des élèves à domicile et procède aux remédiations par des séances d'exercices de renforcement c - Les parents veillent à domicile à l'effectuation des devoirs de leurs enfants.
2. Révision et application	a - L'élève révise les notions acquises à l'école chez lui. b - Les exercices sont corrigés en classe
3. Réinvestissement	a - L'élève conçoit des exercices qu'il propose au maître b - L'élève effectue des tâches volontairement choisies seul ou en groupe
4. Devoirs en classe	a - l'élève dispose de cahiers de devoirs en classe b - les devoirs sont corrigés par le maître

SWAZILAND

Educational Objectives for Primary Education in Swaziland

When a student completes Grade 7 he should be able to:

- speak, read and write effectively in both official languages (siSwati and English);
- use basic numeracy skills in solving day to day problems;
- think logically using acquired skills to solve daily problems;
- apply basic, practical life skills drawn from practical subjects offered at primary school level;
- establish a good work ethic manifested by self-discipline, time-consciousness and judicious use of leisure time;
- display sound values based on beliefs and moral conduct which is demonstrated by pride in Swazi culture, tolerance for others and appreciation of the environment.

Priority Groupings of Hypothesized Factors That Determine School Effectiveness in Swaziland

TEACHING/LEARNING PROCESS

- Variety of individualized and group learning activities

ENABLING CONDITIONS

- An adequately qualified head of school
- Regular supervision to enhance effective management
- Adequately qualified teachers
- Regular in-service training for teachers
- A positive, cooperative attitude in the community towards the development of the school

SUPPORTING INPUTS

- Textbooks and Teachers Guides
- Chalkboards
- Stationery (paper, pens, pencils, rulers)
- Learning aids (other than textbooks)
- Adequate well-maintained and furnished classrooms

Indicators of Selected Factors That Determine School Effectiveness in Swaziland

TEACHING LEARNING/PROCESS

FACTOR: Variety of individualized and group learning activities

A variety of individualized and group learning activities are effective when:

a. the following are observable in a class: group learning, different teaching methods, reading, music, games, role play, discussions, debates, drama, educational field trips and projects
b. variety is shown in preparation books, when different teaching strategies are used for different lessons at different times
c. these activities are done and observed over a 1 - 3 day period of time
d. they are seen in homework given to pupils
e. there is evidence of daily work done by children in their exercise books

ENABLING CONDITIONS

FACTOR: Adequately qualified head of school

An adequately qualified head of school is effective when:

a. he visits classes to assist teachers
b. organizes, co-ordinates and facilitates in-service workshops
c. he is able to prepare a budget for the school and keeps clear financial records
d. he is able to set up a workable composite timetable
e. he holds regular productive staff meetings and these are reflected in the minutes' book
f. he listens to concerns and communicates effectively with staff
g. teachers report or give feedback on what happens in the school
h. there are regular school committee meetings evidenced by entries in the minutes' book and the log book
i. he exhibits good leadership skills
j. he regularly reviews scheme books, registers, preparation books, log books and children's exercise books

FACTOR: Regular supervision to enhance effective management

Effective management is enhanced when:

a. there are regular supervisory visits
b. the head teacher is evaluated annually in terms of the indicators of an effective head teacher
c. support is given to overcome management weaknesses by providing advice, training and materials related to the indicators of an effective head teacher
d. the head teacher assesses, discusses and shares his instructional leadership experiences with teacher leaders to facilitate more effective in-service activities at zonal level

FACTOR: Adequately qualified teachers

Teachers are considered adequately qualified to contribute to school effectiveness when their teaching exhibits:

a. a variety teaching/learning methods
b. the inclusion of information and materials that go beyond the textbook and the teachers' guide
c. factual and Open-ended questions (lower and higher order questioning)
d. the use of regular assessment of pupil learning and of remediation/enrichment activities for pupils who need them
e. use of the chalkboard on a daily basis
f. motivation by arriving before school begins and leaving after the school day ends
g. supervision of physical education and/or a variety of sporting activities
h. high professional ethics, consistency (reliability, stability) and adaptability to change

FACTOR: Regular in-service training for teachers

Regular in-service is effective when:

a. carried out within the school by teachers
b. teachers share ideas and lead sessions effectively
c. workshops are linked to the school curriculum or daily work of the teacher
d. peer learning is encouraged among schools

e. Teachers in a school attend workshops outside the school once per annum
f. teachers report back (feedback) on workshops attended elsewhere

FACTOR: A positive, cooperative attitude in the community towards the development of the school

Community support is effective when there is:

a. good attendance at parents meetings as reflected in the minutes' book
b. children are sent to school on time
c. fees are paid on time
d. contribute labour and/or money for school development projects
e. make sure children complete their homework on time
f. evidence that parents visit the school regularly to monitor the progress of their children

SUPPORTING INPUTS

FACTOR: Textbooks and teachers' guides

Textbooks are adequate for effectiveness in a school when:

a. each pupil has a book for each subject in English, siSwati and Mathematics
b. there are references to the books in teachers' lesson preparation books
c. there are exercises from the textbooks done in students' notebooks
d. pupils are observed using the books in class

Teachers' guides are adequate for effectiveness in a school when:

a. every teacher has a guide for every subject that they teach
b. the teaching strategies observed in classes are found in the teachers' guides
c. pupils show mastery of the learning objectives expressed in the teachers' guides

FACTOR: Chalkboards

A chalkboard is effective when:

a. it is displayed in a convenient place in each class

b. the size is 1.2m x 3.5m (at least covering the classroom wall where it is situated)
c. it can be seen by all pupils facing the board and is well maintained
d. used effectively for each daily lesson
e. both the teacher and pupils use the chalkboard

FACTOR: Stationery (paper, pens, pencils, rulers)

Stationery is effectively used when:

a. every student has an exercise book for each subject, a pencil, a pen and a ruler
b. the teacher has paper and the required preparation and record books
c. it is supplied at the beginning of the school term and available throughout the term

FACTOR: Learning aids (other than textbooks)

Learning aids that support instruction in individual subjects contribute to school effectiveness when:

a. they are available and observable in the classroom
b. they are made and used by the teacher and by the students
c. they are related to the contents of the syllabus, textbooks, and the teachers' guides

FACTOR: Adequate well maintained and furnished classrooms

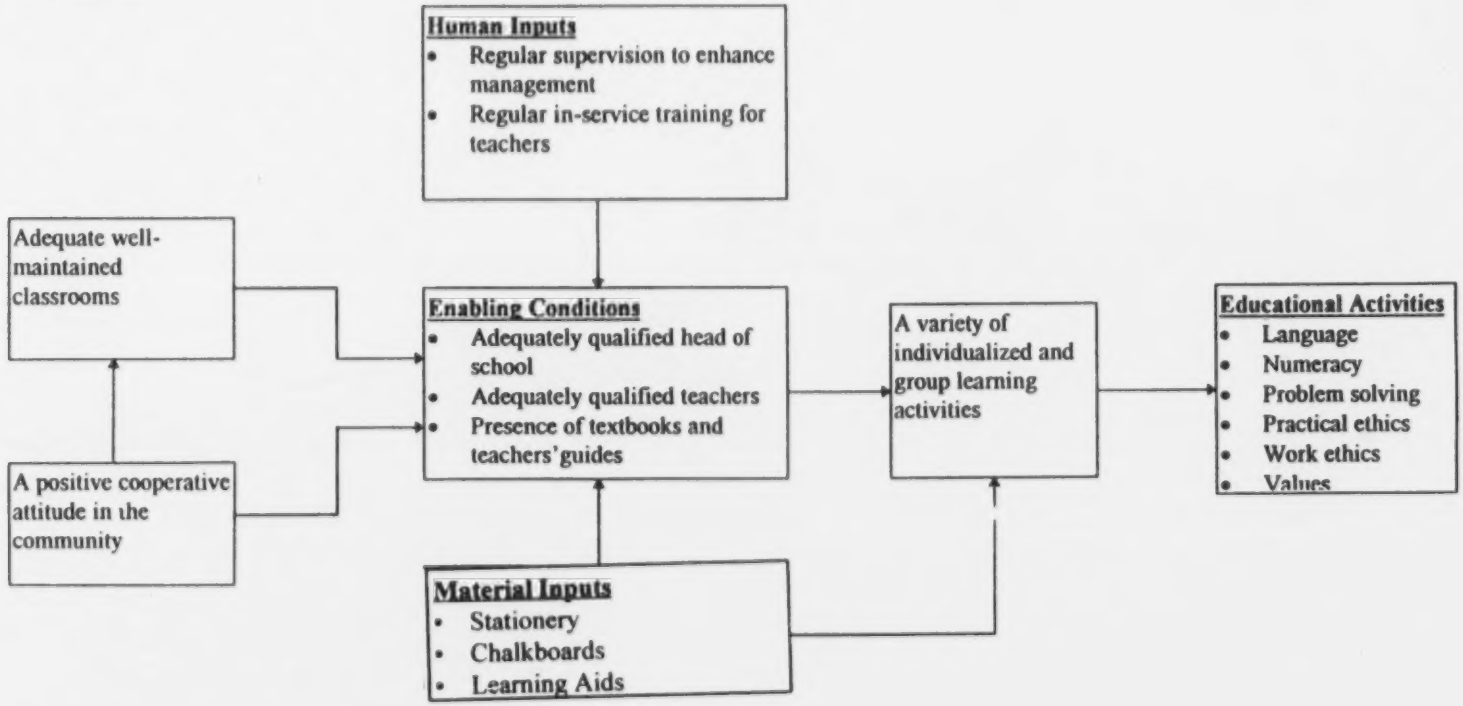
Classrooms are adequate when:

a. there is a chair and desk for every pupil
b. it is well ventilated with good light
c. there is a standard chalkboard for every class
d. there is a cupboard for the teacher to store learning materials
e. it conforms to the Government standard design
f. it is cleaned regularly, painted, with a level floor surface and no broken window panes

Conceptual Framework for the Improvement of Quality in Primary Schools in Swaziland

General Environment

- Government policy and budget
- Social, economic, and political conditions



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